

BARODA ADMINISTRATION REPORT

1902-03 and 1903-04

*Compiled under the orders of His Highness
the Maharaja Gaekwar*

BY

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HIS HIGHNESS

THE MAHARAJA GAEKWAR.

May it please Your Highness,

I have the honour to submit the accompanying Administration Report of Baroda State for the years 1902-03 and 1903-04. The official year of Baroda begins on the 1st August; and the period covered by this Report, therefore, is from August 1902 to July 1904.

2. It has been considered desirable to continue the narrative of some important matters to the close of 1904. When this has been done, the account of the last five months—August to December 1904—has been printed in small type. This arrangement, while it brings the narrative of important transactions up to date, serves also to indicate at a glance the portions of the Report which relate to events subsequent to the expiry of the last official year.

3. It has been customary, hitherto, to bring out two Administration Reports for each year; one was the Summary Report, and the other was the Full Report which appeared later. Neither of these quite fulfilled the object in view; the Summary Report was too sketchy to be interesting, and the Full Report was too voluminous to be readable. The present Report is designed to take the place of the double issue of preceding years. It seeks to present, in a concise form, all figures and tabular statements which are essential or useful, and to narrate all facts which are important or interesting. It seeks to tell, within the limits of a handy volume, all that needs telling.

Your Highness's faithful Servant,

BARODA,
February 1905. }

R. C. DUTT.

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I.—POLITICAL.

(a)—THE STATE AND ITS RULER.

The State of Baroda is divided into four distinct blocks quite apart from each other. The southern district of Narsari lies near the mouth of the Tapti river, and is interlaced with British territory. To the north of the Narbada river is the central district of Baroda, in which the capital city is situated. Further up, and to the north of Ahmedabad, lies the rich district of Kadi with its busy towns and many industries. And far to the west, in the peninsula of Kathiawar, lie tracts of land, isolated and separated from each other, which comprise the district of Amreli. The area of the State in round numbers is eight thousand square miles, and the population is two millions. The State of Baroda, therefore, in respect of its population is a little bigger than Wales, and a little smaller than Switzerland.

The area and population of the four districts vary considerably, and are shown in the following table :—

District.	Area in square miles	Population.	No. of towns.	No. of villages.
Baroda	1,887	6,44,071	14	924
Kadi	3,015	8,31,744	16	1,187
Narsari	1,952	3,00,441	5	979
Amreli	1,245	1,73,436	6	310
Total	8,099	19,52,692	41	3,400

Baroda, with its capital town, is the most thickly populated district, having an average population of 336 per square mile. And the scattered district of Amreli is the most thinly populated, having scarcely 140 people to the square mile.

Over three-fourths of the entire population, or 15,46,992, are Hindus. The Musalmans number 1,65,014 or a little over one-tenth of the Hindus. Tribes or castes, low in civilisation, and returned as "Animistic," number 1,76,250. The Jains are 48,290 in number, forming less than one-thirtieth of the Hindu population. There are also 8,409 Parsees or Zoroastrians, and 7,691 Christians.

In his very interesting chapter on occupations, the Superintendent of the Census of 1901 classes the population of Baroda thus :—

Government Service	...	...	...	4.1 per cent.
Pasture and Agriculture	..	...	51.4	„
Personal Services	...	...	4.98	„
Suppliers of Materials...	...	...	14.2	„
Commerce and Storage...	...	...	3.5	„
Professions	...	...	2.86	„
Unskilled Non-agricultural Labour	...	13.34	„	
Independent of Occupation	...	2.87	„	

Among the people engaged in professions, those dealing with textile-fabrics are 68,213, workers in metals 25,029, workers in earthenware and stoneware 26,284, and workers in wood, cane, &c., 19,364. Commerce of various kinds, not including storage, support 61,080 persons.

The State of Baroda has a very interesting history which stretches back through twelve centuries. When the famous Chinese traveller Hsuen Tsang visited

India in the seventh century after Christ, he found the whole of Gujrat a very flourishing country, ruled by the Valabhis, who had their capital at Valabhipura. In the following century, the power of the Valabhis was broken by the Chalukya Rajputs, who conquered the kingdom and established their capital at Anhalwara-Pattan, situated within the present limits of the Baroda State. When Mahmud of Ghazni invaded Gujrat and attacked the famous temple of Somnath, the Prince of Anhalwara-Pattan marched against him with a large army, and fought a decisive battle for his country and his religion. The Prince was defeated, but collected a fresh army to meet his foe again; and Mahmud avoided a second encounter by retiring across the deserts of Sindh. A succeeding Prince, Kumar Pala, favoured the Jain religion, and the Jains of Baroda assign many of their religious edifices and other public works and gifts to his reign. Altogether the Rajputs ruled for over five centuries, from the eighth to the close of the thirteenth, and some of the ruins of their temples, fortifications and edifices are still visible at Pattan. Alla-ud-din Khilji conquered the country from the Hindus, and the story of the beautiful Princesses Kamala Devi and Devala Devi, who became the wives of Alla-ud-din and his son, is one of the romances of Indian history. For some centuries Pattan continued to be the capital of Gujrat under the Mahomedan rulers; but the seat of Government was eventually removed to Ahmedabad. Gujrat threw off the yoke of Delhi and became an independent Mahomedan kingdom in the fourteenth century, but was once more brought under Northern India by Akbar the Great in the sixteenth century. Aurangzeb's mad bigotry

wrecked the Mogul empire which Akbar had built up, and in the eighteenth century the Mahrattas spread over Gujrat as over other parts of India. Pilajī Rao Gaekwār and his comrades in arms firmly established themselves in Baroda in 1723 ; and the present ruling family has therefore a dynastic record of nearly two centuries.

Events which took place during the rule of Maharaja Malhar Rao led to his deposition in 1875, and the present Maharaja, then a young boy, was chosen for the throne of Baroda. On attainment of his majority His Highness assumed the reins of Government in 1881, and has, since then, personally directed, regulated, and supervised the administration in all departments. His Government is modelled after the system followed in British India ; but modifications, required by the peculiar conditions of this State, are introduced both in legislation and in administration. The heads of the different departments deal with all matters relating to their respective work, and take the orders of His Highness on all important questions. Similarly, officers entrusted with the duty of drafting laws receive their instructions from the Maharaja, publish the first drafts in the *Ajna Patrika* to invite public criticism, revise the drafts in accordance with such criticism, and finally receive the sanction of His Highness to the revised draft before it is passed into law.

Reforms and changes in laws and administration, suggested by the officers of the State, receive the Maharaja's careful consideration ; but in the majority of cases they are initiated by himself. A system of personal government, carried on during more than 20 years, has made him familiar with every detail of administra-

tion ; and his frequent visits to the interior of the State enable him to keep himself in close touch with District and Taluka Officers, and with the actual working of laws and administration. The needs of the State in regard to railways and irrigation, schools and hospitals, municipalities and local institutions, manufacture and agriculture, are thus made known to him. He also keeps himself well informed with what passes outside his own territory—both in British India and in Europe,—and is quick in adopting new ideas and introducing new reforms among his own people. Some of these changes have proved beneficial to his State, while some have not yet been attended with success. The following pages will be found to be an impartial record of our failures as well as of our successes.

The Diwan is the principal Officer of the State under the Maharaja. Early in 1904, owing to the retirement of Diwan Bahadur Dhamnaskar through ill-health, Mr. Kersaspji Rustamji Dadachanji, M.A. and LL.B. of the Bombay University, was appointed Diwan of Baroda. Mr. Kersaspji has served this State during thirty years in various capacities,—as District Officer, as Settlement Commissioner, as Revenue Commissioner, and as Chief Justice, and thus brings a ripe experience and a mature judgment to the performance of his high duties. As Chief Officer of the State, he is primarily responsible to the Maharaja for good administration.

The work of the Diwan is vast and varied, and since years past a Naeb Diwan has helped him in his duties. Mr. Vasudeo Gopal Bhandarkar, B.A. and LL.B. of the Bombay University, was Naeb Diwan in 1901 under Mr. Dhamnaskar, and continued in that

office under Mr. Kersaspi. He is a younger brother of the Hon'ble Dr. Bhandarkar, Member of the Governor-General's Legislative Council, and was a Pleader of the Bombay High Court, and a Professor of Law at Bombay, before he joined service at Baroda. Towards the close of the period under review he was entrusted with the special work of codifying the Hindu Law and with other legal duties, for which his high legal attainments, his natural caution, and his mature judgment, eminently befit him.

Some account of the other high Officers of State, presiding over different departments, will be found in the subsequent sections of this Report. Circulars and orders issued by these Heads of Departments, as well as drafts of law and all State notifications are published in an Official Gazette called *Ajna Patrika*, which is issued from the Government Press. All Reports, Acts, and State publications are issued from this Press.

Some changes in administration, introduced since the close of 1903-04, require a brief mention here. As Mr. Bhandarkar was employed almost exclusively on legal duties, and was eventually appointed Legal Remembrancer to the State, the necessity of appointing another Officer to share the Diwan's duties became felt. Accordingly in the first month of the current year, i.e., in August 1904, His Highness the Maharaja invited Mr. R. C. Dutt, C.I.E., to accept office in the State. Mr. Dutt had been called to the Bar, and had also entered the Indian Civil Service, in 1871, and, after his retirement from that service in 1897, had continued his enquiries into Indian Administration and also his studies in Indian History and Literature. The Maharaja placed Mr. Dutt, under the title of *Amatya*, in special and independent

charge of the Revenue, Finance, and Land Settlement departments, and desired him to pay his special attention to the fiscal policy, and the agricultural, industrial and commercial advancement of the State. As the monsoon failed, and the prospects of the year darkened, it became necessary to organise famine relief operations towards the close of 1904 ; and Mr. Dutt was placed in charge of those operations in addition to his other duties.

A younger member of the Indian Civil Service, Mr. C. N. Seddon, returned from furlough in November 1904, and joined the State as Survey and Settlement Commissioner. Mr. Seddon belongs to the Bombay Civil Service, and was Assistant Resident of Baroda before he went on furlough ; and his services have now been lent to His Highness the Gackwar for the Settlement of some Talukas in the State. His knowledge of the State, its people, and its language, combined with his experience in administrative work, eminently befits him for the duties now entrusted to him. The nature of these duties, too, keeps him generally in the villages in the interior, and the information he is thus able to gather from personal observation, regarding the condition of the people and their systems of cultivation and irrigation, is greatly valued by the Maharaja, and is highly useful to general administration.

An important change in the method of administration has also been inaugurated. His Highness the Maharaja has formed an *Executive Council*, consisting of the principal Officers of the State ; and many important questions were referred to this Council for discussion and opinion during the closing months of 1904. It is believed that this system, when fully organised, will not only relieve the Maharaja himself from much of the details of his work, but is likely to secure a continuity of policy, and a stability in administration, for all time to come.

(b)—THE PALACE.

His Highness the Maharaja is blessed with four sons and one daughter. His first wife gave birth to Shrimant Yuvaraj Fateh Singh Rao in 1883, and died shortly after. His Highness then wedded the present Maharani, and she has presented him with three sons and a daughter.

The Household or Khangī Department, as it is called, concerns itself not only with the personal expenses of the Maharaja's family, but also with many public institutions more or less connected with the palace, as is shown below. Mr. W. Harding was appointed Khangī Karbari, or Officer in charge of the Household, in December 1903, and continues in that post to the present date.

The expenditure of the department during the two years under report is shown in the following table:—

Items.			1902-1903.	1903-1904.
			Rs.	Rs.
Household	...	...	6,74,635	11,13,698
Karkhanas	...	...	4,32,861	4,96,778
Devasthans	...	...	35,471	18,597
Gardens	...	...	1,47,897	1,39,104
Donations	...	...	1,36,023	1,09,273
Miscellaneous	...	...	3,22,718	1,14,161
Total	...	...	17,49,325	19,91,611

The increase in the first item in 1903-04 is mainly due to the marriage of Yuvaraj Fateh Singh Rao, which took place in February 1904, and cost over 4½ lacs.

Among the many Karkhanas, included in the second item of the above list, the most interesting is the Jewellery Karkhana where all the State jewellery of the

Ruling Family is kept. • A Committee consisting of hereditary Asamdars and others is in charge of the working of this department. Visitors to Baroda, who wish to see the State jewellery, obtain a pass without difficulty or delay ; and some of the jewels have been greatly admired by ladies from all parts of the world who have visited the State. Other Karkhanas, which are not unfrequently visited, are the Buggy-khana or stables, and the Pilkhana or elephant house. Elephants are greatly in requisition for processions on festive days and also for sports. Plans have been prepared for the construction of a new Buggy-khana, as the present site and building are considered unsuitable.

A reduction is shown in the expenditure incurred on the third item, as many of the Devasthanas, or temples and religious institutions, have been transferred from the Household to the Settlement Department.

A small decrease in expenditure was also effected in the fourth item, viz., the State Gardens. These include the gardens of the Lakshmi Vilas Palace and Makarura Palace, as well as the public park and gardens in the town. This park is a great boon to the people, and is largely frequented on Tuesdays when His Highness's band plays there. A museum inside the park, and some wild animals and birds which are kept there, are also a great attraction for the people.

The last two items showed a considerable decrease in the year 1903-04 as compared with the previous year. The reduction in Miscellaneous expenditure is mainly owing to the fact that the expenses of attending the Delhi Darbar fell within the preceding year 1902-03. The expenses came to 2½ lacs.

Among the eminent personages who visited Baroda within the two years under review may be mentioned the Maharaja of Dhar, the Maharaja of Kapunthala, the Thakore Saheb of Gondal, the Thakore Saheb of Baria, the Ranee of Akkalkote and a Royal Duke from Russia. And among the places visited by His Highness the Maharaja Gaekwar outside his own territory were Dewas, Mhow, Dhar, Naini Tal, Lanoli, Conoor, Ootacamund, Kashmir and Mahableshwar.

Honours were bestowed by His Highness on some of his relations and the late Phadnis on auspicious occasions. The title of Himmat Bahadur was bestowed on the Maharaja's brother, Shrimant Anand Rao Gaekwar; and the gift of an elephant and umbrella was made to his other brother, Shrimant Sampat Rao Gaekwar, who is a District Officer in the State.

(c)—THE ARMY.

The strength of the Regular Force at the close of the year 1903-04, as compared with the fixed strength, was as follows :—

Description of Force.	Fixed Strength.			Actual Strength.		
	Effective.	Non-effective.	Total.	Effective.	Non-effective.	Total.
ARTILLERY.						
Light Field Battery.. ..	94	66	160	67	48	115
CAVALRY.						
The Moti Khas Paga ..	455	24	479	347	17	364
The Ohoti Khas Paga ..	455	24	479	361	24	375
The Fateh Singh Rao Regiment	455	24	479	428	28	451
The Guards	135	10	145	134	10	144
Total ..	1,500	82	1,582	1,260	79	1,339

Description.	Fixed strength.			Actual strength.		
	Effective.	Non-effective.	Total.	Effective.	Non-effective.	Total.
INFANTRY.						
1st Regiment	698	29	727	773	39	812
2nd Regiment	698	49	747	768	89	807
3rd Regiment	698	29	727	708	41	749
4th Regiment	514	27	541	Amalgamated with the three Regiments.		
Okha Battalion	461	14	475	461	14	475
Total	3,069	148	3,217	2,710	133	2,843
The Band	111	6	117	107	6	113
General and Staff Officers ..	6	2	8	4	..	4
GRAND TOTAL	4,780	304	5,084	4,148	261	4,409

The cost of maintaining the above force during the two years under review is shown in the following table:—

Year.	Artillery.	Cavalry.	Infantry.	Band.	General and Staff Officers.	Medical Establishment.	Veterinary Establishment.
1902-03	Rs. 44,017	Rs. 5,08,384	Rs. 3,38,013	Rs. 26,101	Rs. 29,280	Rs. 10,678	Distributed among foregoing heads.
1903-04	36,028	5,16,040	3,83,454	35,316	27,750	10,178	4,338

In round numbers the Regular Force costs this State ten lacs of rupees a year. The average annual cost per effective man in the Artillery was Rs. 538, in the Cavalry Rs. 409, and in the Infantry Rs. 141 during 1903-04. Or taking the whole force together, the average cost per effective man was Rs. 242, or about Rs. 20 a month.

The total Irregular Force during both the years was as follows:—

<i>Horse.</i>				
Shilledari.	Sibandi.	Paganihaya.	Khalsa.	Total.
908	333	182	577	2,000

<i>Foot.</i>		
Sibandi.	Khalsa.	Total.
1,139	667	1,806

And the expenditure incurred on account of the Irregular Force is shown below :—

Year.	Horse.	Foot.	Other Establishment.	Total.
	Rs.	Rs.	Rs.	Rs.
1902-03	6,86,032	89,108	1,44,089	9,19,229
1903-04	6,53,052	50,978	58,449	7,62,479

It will thus be seen that the Irregular Force cost nearly as much as the Regular Force in 1902-03. But the cost was greatly reduced in 1903-04. The reduction under head "Horse" was effected largely by the reduction of allowances in the case of Sardars and Shilledars who died without leaving any heirs.

The average cost of the Irregular Force per effective Horse was Rs. 326 and per effective Foot was Rs. 28 during 1903-04. The average cost per effective man was Rs. 200 the year, or about Rs. 16 the month.

Taking the Regular and the Irregular Force together the total cost is shown below :—

Year.	Regular.	Irregular.	Pension and Gratuity.	Total.
	Rs.	Rs.	Rs.	Rs.
1902-03.	10,11,473	9,19,229	60,995	19,91,697
1903-04	10,05,108	7,82,479	61,610	18,29,197

An expenditure of Rs. 3,54,710 on account of the annual Contingent Commutation money paid to the British Government is also debited to the Military Department. The *Grand Total* of expenditure in the Military Department in the year 1903-04 was, therefore, Rs. 21,83,907, which comes to about one-seventh of the annual revenues of the State.

At the close of the period under review General Nissen was acting as Senapati or the Commander-in-Chief of the Army. He joined the Baroda Army as Lieutenant in 1865, and became a Captain in 1867 and a Colonel in 1887. Two years after, he was transferred from the Infantry to the Cavalry and Artillery Brigade. On the retirement of General Hardie, and the transfer of Shrimant Ganpat Rao to the Judicial Department, he was promoted to the rank of General. He has witnessed the deposition of the late Gaekwar Malhar Rao, and the rise of the present Maharaja, and his long and faithful services to the State are greatly appreciated. In 1885, it was his duty to put down the armed resistance offered by Siddi Suleiman and others, and the Siddi and his followers were soon disposed of. And in 1898, he took charge of an expeditionary force to put down a rising at Pilwai.

Colonel Wilcox was in command of the Infantry Brigade at the close of the year under report. He joined the Baroda Military Service as Lieutenant over 30 years ago, and became a Captain in 1874. In 1897 he was promoted to the rank of Colonel commanding the Infantry Brigade.

Colonel Lynn was acting as Colonel of the Cavalry Brigade at the close of the period under report. He retired from service at the commencement of the current official year, *i.e.* in August 1904.

The Fateh Sinh Rao Cavalry was named so after Yuvaraj Fateh Sinh Rao, the eldest son of the Maharaja, from the 11th August 1885. In 1902, His Highness appointed the Yuvaraj in the Fateh Sinh Rao Cavalry to learn military duties, and he has been working as Honorary Lieutenant of the Regiment since that time.

(d)—RELATIONS WITH THE BRITISH GOVERNMENT.

The relations of the State with the British Government and with the neighbouring Native States continued satisfactory during the years under review.

No case of mail robbery occurred in this territory. The requisite facilities were given to the postal department, as far as practicable, to open additional post offices and letter-boxes in all the districts of the State.

Arrangements relating to the mutual extradition of criminals and co-operation in police matters between His Highness's Government and the neighbouring British Districts and Native States were conducted satisfactorily as before.

The question of the payment of maintenance and conveyance charges of accused persons and of live-stock

in extradition cases by the surrendering State, came up for discussion on a motion from His Highness the Nizam's Government. And it was ultimately settled that such charges should be borne by the authority making the surrender, instead of by the authority demanding the same. The arrangement applies to extradition cases arising between the Baroda State and British Districts or Native States in the Bombay Presidency, and also to the Hyderabad State.

The question of the disposal of property, which might be the subject of a criminal offence, committed in one jurisdiction and found in another jurisdiction, with persons other than the accused, having been referred to the Government of India, it was held that as no real distinction can be drawn between the two classes of stolen property, namely, property found with the accused and property found in the possession of third parties, the practice obtaining in the adjoining Native States and British Districts should, it was held, be followed in the Baroda State, and all stolen property produced in evidence should be dealt with in accordance with the provisions of Section 517 of the Code of Criminal Procedure.

A question having arisen regarding the admission in evidence by the Courts of the Baroda State of documents certified to be true copies by Courts in British India under their seal and signature, but without the countersignature of the Resident, instructions were issued by His Highness's Government to the Courts concerned to admit such documents in evidence. On a motion from His Highness's Government, the Government of India were pleased to issue a Notification

authorizing all District Judges, District Magistrates, Subordinate Judges, and Magistrates of the First Class in the Baroda State, to certify documents for the purposes of Section 79 of the Indian Evidence Act, I of 1872.

At the instance of the Political Agent, Mahi Kantha, we agreed, as a tentative measure for a period of two years, to allow direct correspondence to be carried on between the Courts of the Mahi Kantha Agency and those of the Baroda State, in the matter of the service of summonses on witnesses concerned in purely civil or criminal proceedings.

An arrangement was come to between His Highness's Government and all the Collectors and Political Agents whose districts march with Baroda territory, whereby the Vahivatdars of this State and the Mamlatdars and Thanadars under the British Districts and Agencies, were authorized to conduct direct correspondence in matters connected with the execution of repairs to boundary pillars on their respective boundaries, except in those cases where grounds of disputes existed.

In 1903, a Convention was concluded between Great Britain and France in regard to the extension to India of the French Minimum Tariff on Colonial produce. Article IV provided that the privileges and engagements comprised in the Convention should extend to Native States of India which by Treaty with the British Government or otherwise, might be entitled to be placed, with regard to the stipulations of the Convention, on the same footing as British India. The Government of India having invited our remarks with reference to this Article, we stated that as the Baroda territories did not adjoin French possessions in

India, nor had they any commercial relations with them, we were not solicitous of securing the advantages or privileges offered by the Anglo-French Treaty.

- Mr. Lakshmilal Daulat Rai continued to be in charge of the Huzur English Office, *i. e.*, of Political Correspondence work, during the two years under review, and performed his duties with his usual tact, ability and care. He joined the service of the State as far back as 1873, and the personal title of "Rao Sahab" was conferred on him in 1893 by the British Government in recognition of his services.

(e)—THE DELHI DARBAR.

The accession to the throne of His Imperial Majesty King Edward VII, Emperor of India, was proclaimed at St. James' Palace on January 24, 1901, and the ceremony of his coronation and that of his Consort the Queen was performed in England on August 9, 1902. An Imperial Darbar was held at Delhi by His Excellency the Viceroy and Governor-General of India on January 1, 1903, for the purpose of celebrating in His Majesty's Indian Dominions this auspicious event.

To this Darbar were invited the Princes, Chiefs and Nobles of the Native States, the Governors, Lieut.-Governors and Heads of Administrations from all parts of India, and Representatives, both European and Indian, of all the Provinces of the Empire.

In instructing His Excellency the Viceroy to hold this Darbar, His Majesty had desired it to be made known that he was anxious to afford to all the Princes and Chiefs of India the opportunity of testifying their loyalty to his throne and person, and that attendance thereat would be regarded by His Majesty as equivalent

to presence at his coronation in England. His Majesty was also pleased to specially depute his brother, His Royal Highness the Duke of Connaught and the Duchess of Connaught, to represent the Royal Family at the Darbar.

A *Kharita* having been addressed by His Excellency the Viceroy to His Highness the Maharaja, on 19th March 1902, requesting the honour of His Highness's presence at Delhi on the auspicious occasion, the same was promptly responded to by His Highness, with an acceptance of the invitation.

Major Marriot, Assistant Resident at Amreli, was deputed to Delhi by the Resident as Political Officer or Baroda Attaché, Foreign Department. He was under the instructions of the Executive Committee for the Coronation Darbar to assist our officials in laying out the camp of His Highness, and to receive His Highness on arrival.

A Special Medical Officer was deputed to Delhi with the necessary establishment and appliances for our camp. He was in all sanitary arrangements connected with the Baroda Camp under the control and supervision of the Sanitary Commissioner of the Punjab.

As the General Police arrangements in connection with the Imperial Darbar were placed under the control of the Punjab Government, we obtained the loan of forty policemen, belonging to the Punjab Police, for the purpose of guarding our camp. The necessary precautions were also taken against fire in the camp.

The Baroda camp which was pitched on a plain near the village of Sakarpur, four or five miles to the west of the city of Delhi, and close to the Mysore camp,

covered an area of 9,60,000 square feet. This area was occupied by Their Highnesses and a following consisting of 15 Officers, 3 European gentlemen and 4 ladies, 18 Nobles and Mankaris, 150 Military Retainers, and 407 servants and menials, the whole strength numbering 597. There were also 150 horses and 2 elephants.

A semi-portable wooden palace was erected in the camp for the residence of His Highness the Maharaja, while special tents were pitched for the accommodation of Her Highness the Maharani, the Rajkumars, and the Rajkumari. In front of the bungalow, a garden was laid out with a fountain in the centre. A triumphal arch, 56 feet in height, was erected at the entrance to the camp. Electric installation was provided, and the whole place was brilliantly illuminated after dark.

The State troops, carriages, horses, tents, furniture, and heavy baggage, together with followers, were sent to Delhi in advance by special trains, all necessary assistance being rendered by the B. B. & C. I. Railway authorities in connection with their transmission. Only the elephants had to be sent by road.

The 27th of December was fixed as the last day for arrival at Delhi of Princes and Heads of Local Governments. Proceedings and ceremonies in connection with the Darbar were to commence from the 29th of December, and to last till the 10th of January 1903, the date fixed for the departure of His Excellency the Viceroy. The invitation of the Viceroy covered the entire period, and in the interest of the success of the ceremonies it was suggested that official guests should stay, if possible, throughout the whole time.

His Highness the Maharaja Gaekwar was unavoidably prevented from leaving Baroda on the 26th December, and from taking part in the elephant procession from the Railway station to the Viceregal camp, owing to the demise at Baroda on the 16th December of Her Highness Radhabai, widow of His late Highness Maharaja Ganpatrao Gaekwar.

Their Highnesses the Maharaja and Maharani Chimnabai, C. I., accompanied by Shrimant Yuvaraj Fateh Singh Rao, Shrimant Rajkumars Shivaji Rao and Dhairyashil Rao and Rajkumari Indira Raja, the Minister, Diwan Bahadur Ramchandra Vithoba Dhamnaskar, and a select number of Sardars, Officers, and followers, left Baroda by a special train on December 29, and reached Delhi on December 31, when the following programme was followed :—

“ On the occasion of the arrival at Delhi of His Highness the Gaekwar of Baroda, on Wednesday, the 31st December 1902, at 7-30 a.m. (railway time), His Highness will be met at the main Railway station by the Commissioner of Delhi, the Under Secretary in the Foreign Department, an attaché of the Foreign Department, and a District Superintendent of Police.

“ A salute of 21 guns will be fired from the fort as the Gaekwar's train enters the Railway station.

“ A Guard of Honour with band and Regimental colour, will be drawn up at the Railway station, and will salute as His Highness passes.

“ A carriage with an escort of Native Cavalry consisting of two non-commissioned Officers and 12 Sowars will be in waiting at the Railway station to convey the Gaekwar to his Camp, to which His Highness will be

accompanied by the attaché of the Foreign Department.

“On arrival at the Gaekwar’s camp the attaché will take leave.

• “Undress Uniform will be worn.” • •

It was decided by His Excellency the Viceroy, that the opportunity should be taken of the Coronation Darbar, for the Exhibition of a typical collection of the best Indian artware, so as to add to the attractiveness of the occasion for the large number of visitors, and also to enable the Government of India to form a more general and accurate survey, of the condition of the art industries of India, and to judge of the extent to which they were favourably or unfavourably affected by foreign competition or foreign demand. The Exhibition was restricted to select specimens of the leading art—manufactures of India, articles of foreign manufactures being rigidly excluded.

The Government of India having requested that assistance might be rendered to Dr. Watt in making arrangements for the representation of the art industries which were practised in Baroda territory, His Highness’s Government cordially co-operated in the object. The gentleman accordingly visited the Baroda Museum, the Zaverkhana, and the Palace stores, and selected some of the art specimens he thought fit for Exhibition as a loan collection of the Baroda State. These were forwarded to Delhi, together with some artware of Baroda which Dr. Watt had ordered to be made, such as wood-carving, brass-ware, sandal-wood, embroidery, etc. The articles sent from Baroda were the object of great admiration at the Exhibition, which was formally

opened by H. E. the Viceroy on the 30th of December.

On the date fixed for the Imperial Darbar, viz, January 1, His Highness the Maharaja, accompanied by his sons Shrimant Yuvaraj Fateh Singh Rao and Shrimant Rajkumar Shivaji Rao, drove up to the amphitheatre. On alighting from his carriage His Highness was met by an Officer of the Foreign Department on duty there, who conducted him to his seat, the guard posted at the entrance to block "W" presenting arms.

The seats of the Princes and Chiefs were arranged territorially by Provinces. The three leading Chiefs, viz. His Highness the Nizam of Hyderabad, His Highness the Gaekwar of Baroda, and His Highness the Maharaja of Mysore, were grouped together, and seats were assigned to them in the front row in block "W" to His Excellency's right hand.

Arrangements were made to screen off a portion of block "Y" immediately to the right of Dais, and to prepare a curtained box which was set apart for the wives and female relatives of certain of the Princes present at Delhi. Her Highness the Maharani attended the Darbar, and received due accommodation in this block. Her Highness's daughter Shrimant Indira Raja, and the youngest son Shrimant Rajkumar Dhairya-shil Rao, also sat with Her Highness in this block.

The Herald having read the Royal Proclamation charging Lord Curzon of Kedleston to hold a Darbar at Delhi on the 1st January 1903, His Excellency the Viceroy rose and addressed the Darbar as follows :—

"Your Royal Highnesses, Princes, and Peoples of India,—Five months ago, in London, His Majesty King

Edward VII, King of England and Emperor of India, was invested with the crown and sceptre of the English Kings. Only a few representatives of the Indian Empire had the good fortune to be present at that ceremony. To-day His Majesty has by his royal favour afforded an opportunity to all his Indian people to take part in similar rejoicings; and here, and elsewhere throughout India, are gathered together in honor of the event the Princes and Chiefs and Nobles, who are the pillars of his throne, the European and Indian Officials who conduct his administration with an integrity and devotion to duty beyond compare, the Army, British and Native, which with such pre-eminent bravery defends his frontiers and fights his wars, and the vast body of the loyal inhabitants of India, of all races, who, amid a thousand varieties of circumstance and feeling and custom, are united in their spontaneous allegiance to the Imperial crown. It was with the special object of thus solemnising his Coronation in India that His Majesty commanded me, as his Viceroy, to convene this great Darbar, and it is to signify the supreme value that he attaches to the occasion that he has honoured us by deputing his own brother, His Royal Highness the Duke of Connaught, to join in this celebration.

"It is twenty-six years since, on the anniversary of this day, in this city of Imperial memories and traditions, and on this very spot, Queen Victoria was proclaimed the first Empress of India. That act was a vindication of her profound interest in her Indian subjects, and of the accomplished unity of her Indian dominions under the paramountcy of the British Crown. To-day, a quarter of a century later, that Empire is not

less, but more united. The Sovereign to whom we are met to render homage is not less dear to his Indian people, for they have seen his features and heard his voice. He has succeeded to a throne, not only the most illustrious, but the most stable in the world ; and ill-informed would be the critic who would deny that not the least of the bases of its security—nay, I think, a principal condition of its strength—is the possession of the Indian Empire, and the faithful attachment and service of His Majesty's Indian people. Rich in her ancient traditions, India is also rich in the loyalty which has been kindled anew in her by the West. Amid the crowd of noble suitors who, through all the centuries, have sought her hand, she has given it only to the one who has also gained her Trust.

“ Nowhere else in the world would such a spectacle be possible as that which we witness here to-day. I do not speak of this great and imposing assemblage, unparalleled as I believe it to be. I refer to that which this gathering symbolises, and those to whose feelings it gives expression. Over one hundred rulers of separate States, whose united population amounts to sixty millions of people, and whose territories extend over fifty-five degrees of longitude, have come here to testify their allegiance to their common Sovereign. We greatly esteem the sentiments of loyalty that have brought them to Delhi from such great distances, and often at considerable sacrifice ; and I shall presently be honored by receiving from their own lips their message of personal congratulation to the King. The Officers and Soldiers present are drawn from a force in India of nearly two hundred and thirty thousand men, whose pride it is that

they are the King's Army. The leaders of Indian society, official and unofficial, who are here, are the mouth-pieces of a community of over two hundred and thirty million souls. In spirit, therefore, and one may almost say, through their rulers and deputies, in person, there is represented in this arena nearly one-fifth of the entire human race. All are animated by a single feeling, and all bow before a single throne. And should it be asked how it is that any one sentiment can draw together these vast and scattered forces and make them one, the answer is that loyalty to the sovereign is synonymous with confidence in the equity and benignity of his rule. It is not merely the expression of an emotion, but the record of an experience and the declaration of a belief. For to the majority of these millions the King's Government has given freedom from invasion and anarchy ; to others it has guaranteed their rights and privileges ; to others it opens ever-widening avenues of honorable employment ; to the masses it dispenses mercy in the hour of suffering ; and to all it endeavours to give equal justice, immunity from oppression, and the blessings of enlightenment and peace. To have won such a dominion is a great achievement. To hold it by fair and righteous dealing is a greater. To weld it by prudent statesmanship into a single and compact whole will be, and is, the greatest of all.

"Such are the ideas and aims that are embodied in the summoning of this Coronation Darbar. It is now my duty to read to you the gracious Message which His Majesty has desired me to convey to his Indian people:—

'It gives me much pleasure to send a message of greeting to my Indian people, on the solemn occasion

when they are celebrating my Coronation. Only a small number of the Indian Princes and representatives were able to be present at the ceremony which took place in London ; and I accordingly instructed my Viceroy and Governor-General to hold a great Darbar at Delhi, in order to afford an opportunity to all the Indian Princes, Chiefs, and peoples and to the Officials of my Government, to commemorate this auspicious event. Ever since my visit to India in 1875, I have regarded that country and its peoples with deep affection ; and I am conscious of their earnest and loyal devotion to my House and Throne. During recent years many evidences of their attachment have reached me : and my Indian Troops have rendered conspicuous services in the Wars and Victories of my Empire.

‘ I confidently hope that my beloved Son, the Prince of Wales, and the Princess of Wales, may before long be able to make themselves personally acquainted with India and the country which I have always desired that they should see, and which they are equally anxious to visit. Gladly would I have come to India upon this eventful occasion myself had this been found possible. I have, however, sent my dear brother, the Duke of Connaught, who is already so well known in India, in order that my Family may be represented at the ceremony held to celebrate my Coronation.

‘ My desire, since I succeeded to the Throne of my revered Mother, the late Queen Victoria, the First Empress of India, has been to maintain unimpaired the same principles of humane and equitable administration which secured for her in so wonderful a degree the

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 veneration and affection ~~on~~^{to} her Indian subjects. To all my Feudatories and Subjects throughout India I renew the assurance of my regard for their liberties, of respect for their dignities and rights, of interest in their advancement, and of devotion to their welfare, which are the supreme aim and object of my rule, and which, under the blessing of Almighty God, will lead to the increasing prosperity of my Indian Empire and the greater happiness of its People.'

" Princes and Peoples of India,—These are the words of the Sovereign whose Coronation we are assembled to celebrate. They provide a stimulus and an inspiration to the officers who serve him, and they breathe the lessons of magnanimity and goodwill to all. To those of us who, like my colleagues and myself, are the direct instruments of His Majesty's Government, they suggest the spirit that should guide our conduct and infuse our administration. Never was there a time when we were more desirous that that administration should be characterised by generosity and leniency. Those who have suffered much deserve much; and those who have wrought well deserve well. The Princes of India have offered us their soldiers and their own swords in the recent campaigns of the Empire; and in other struggles, such as those against drought and famine, they have conducted themselves with equal gallantry and credit. It is difficult to give to them more than they already enjoy, and impossible to add to a security whose inviolability is beyond dispute. Nevertheless, it has been a pleasure to us to propose that Government shall cease to exact any interest for a period of three years upon all loans that have been made or guaranteed by

the Government of India to Native States in connection with the last famine ; and we hope that this benefaction may be acceptable to those to whom it is offered. Other and more numerous classes there are in this great country to whom we would gladly extend, and to whom we hope before long to be in a position to announce relief. In the midst of a financial year it is not always expedient to make announcements, or easy to frame calculations. If, however, the present conditions continue, and if, as we have good reason to believe, we have entered upon a period of prosperity in Indian finance, then I trust that these early years of His Majesty's reign may not pass by without the Government of India being able to demonstrate their feelings of sympathy and regard for the Indian population by measures of financial relief, which their patient and loyal conduct in years of depression and distress renders it especially gratifying to me to contemplate. I need not now refer to other acts of consideration or favour which we have associated with the present occasion, since they are recorded elsewhere. But it is my privilege to make the announcement to the officers of the Army that henceforward the name of the Indian Staff Corps will cease to exist, and that they will belong to the single and homogeneous Indian Army of the King.

“Princes and Peoples,—If we turn our gaze for a moment to the future, a great development appears with little doubt to lie before this country. There is no Indian problem, be it of population or education or labour or subsistence, which it is not in the power of statesmanship to solve. The solution of many is even now proceeding before our eyes. If the combined arms

of Great Britain and India can secure continued peace upon our borders, if unity prevails within them, between Princes and People, between European and Indian, and between rulers and ruled, and if the seasons fail not in their bounty, then nothing can arrest the march of progress. The India of the future will, under Providence, not be an India of diminishing plenty, of empty prospect, or of justifiable discontent; but one of expanding industry, of awakened faculties, of increasing prosperity, and of more widely distributed comfort and wealth. I have faith in the conscience and the purpose of my own country; and I believe in the almost illimitable capacities of this. But under no other conditions can this future be realised than the unchallenged supremacy of the paramount power, and under no other controlling authority is this capable of being maintained, than that of the British Crown.

“And now I will bring these remarks to a close. It is my earnest hope that this great assemblage may long be remembered by the peoples of India as having brought them into contact at a moment of great solemnity with the personality and the sentiments of their Sovereign. I hope that its memories will be those of happiness and rejoicing, and that the reign of King Edward VII, so auspiciously begun, will live in the annals of India and in the hearts of its people. We pray that, under the blessing of the Almighty Ruler of the Universe, his sovereignty and power may last for long years, that the well-being of his subjects may grow from day to day, that the administration of his officers may be stamped with wisdom and virtue, and that the security and beneficence of his dominion may endure for ever.

“ Long live the King, Emperor of India.”

The ceremony of presentation of the Ruling Chiefs, in order to enable them to offer their congratulations to His Majesty the King Emperor through His Excellency the Viceroy, was then begun. The Ruling Chiefs one after another, in the order previously arranged, left their seats and advanced to the Dais, where the Viceroy and the Duke of Connaught received them standing. The name and style of each Chief were announced by the Foreign Secretary, and the Viceroy first shook hands with him before receiving his message, while the Duke of Connaught followed with a similar greeting. Their Highnesses the Nizam, the Maharaja Gaekwar and the Maharaja of Mysore advanced first.

His Highness the Maharaja Gaekwar asked the Viceroy to convey to His Majesty the King Emperor his hearty congratulations on his Coronation and his good wishes for the new year. With the presentation of the last of the Chief, the Darbar came to an end.

On January 3, a Grand Chapter of the two Indian Orders of the Star of India and the Indian Empire was held in the Dewan-i-Am by His Excellency the Viceroy and Governor General of India, who is the Grand Master of both the orders. His Highness the Maharaja being a Knight Grand Commander of the most exalted Order of the Star of India, took part in the procession in full dress and robe. His Highness also witnessed the Assault-at-Arms which took place on the 3rd and 5th of January.

The State Ball took place on January 6, in the Dewan-i-Am and Dewan-i-Khas, to which a large number of guests was invited. The Ball was attended

by His Highness the Maharaja along with several other leading Princes.

The 7th of January was fixed for the special parade of the retinues of the Princes. The gold and silver guns of Baroda were exhibited at the review which took place on this date, and which His Highness witnessed.

A grand review of the whole body of British Troops assembled at Delhi was held on the 8th of January on a level plain in the vicinity of the camps in which about 30,000 troops of all ranks, including the Imperial Service Troops, took part under His Excellency the Commander-in-Chief. Most of the Princes attended, some of them being on parade at the head of their Imperial Service Contingents. Their Highnesses the Maharaja and Maharani went to see the review.

On January 9, an evening party was given in the Viceregal tents, to which all the Ruling Chiefs were invited, as well as a large number of high Officials and distinguished visitors to Delhi. One of the objects of this gathering was to provide an opportunity for personal meetings between the Viceroy and the Chiefs. His Highness the Maharaja, accompanied by the Yuvaraj, attended this evening party.

On the 10th of January, His Excellency the Viceroy and Their Royal Highnesses the Duke and Duchess of Connaught left Delhi before noon by special trains. His Highness the Maharaja was present at the railway station along with the other Ruling Princes.

As it was suggested by the Foreign Office that any visits from one Ruling Chief to another, or between high officials and Ruling Chiefs, should be of an informal character, His Highness the Maharaja exchanged in-

formal visits with several Princes, amongst whom may be mentioned the Rulers of Kashmir, Gwalior, Indore, Mysore, Bikaner, Sirohi, Bhaonagar, Gondal, Faridkote, Kapurthala, Cooch Behar, Dhar, Dewas, Kolhapur, Pudukota, Kochin, Orcha, Rewa, Chamba, Sirmur, and Rampur.

Their Highnesses the Maharaja and Maharani took their departure from Delhi on January 10, at 6 p.m., by a special train. The following programme was observed on the occasion :—

“His Highness the Gaekwar of Baroda will leave Delhi on Saturday, the 10th January 1903, starting from the Main Railway Station at 6-1 p.m. (railway time).

“The Commissioner of Delhi, an Attaché of the Foreign Department, and a District Superintendent of Police, will attend at the Railway Station, where they will take leave of His Highness.

“A salute of 21 guns will be fired from the fort at the hour fixed for His Highness’ departure.

“Undress uniform will be worn.”

The Coronation of the King Emperor was celebrated at the Capital of Baroda and in the Baroda territories, in the following manner :—

General holidays were observed throughout the State on the 1st and 2nd of January. On the 1st, an Imperial salute of 101 guns was fired from the State Artillery at the capital, 137 convicts were released from the State Jails as an act of clemency and grace, and the principal portions of the city and public buildings were illuminated in the evening. At the Head Quarters of the Kadi, Naosari and Amreli Districts the Royal Proclamation was publicly read out in the Vernacular

by the Local Officials at special Darbars held by them. A Darbar was held at the Residency by the First Assistant Resident, which was attended by such of the Sardars and Officers of the State as were present in Baroda. On the 2nd an entertainment was given to the school children at Baroda, and the poor were fed at the Head-Quarters of the three Districts above-mentioned.

After the return of His Highness the Maharaja from Delhi, a Darbar was held by His Highness at the Lakshmi Vilas Palace on January 24th, in the afternoon, to which the Resident and all the European Officers of the station as well as all the Sardars, Darakdars, State Officers, and the leading gentry of the city were invited. The Royal Proclamation and its translation in the Vernacular were, by command of His Highness, publicly read out by Mr. Jamsedji Ardesar Dalal, the then Sar Subah. The State Artillery and Troops fired an Imperial salute with *Feu-de-Joi*, the Band playing the National Anthem at customary intervals. The 24th of January was observed as a public holiday at the capital. A State dinner was, later on, given by His Highness to the ladies and gentlemen of the station in honor of the memorable event.

One gold and four silver medals in commemoration of the Delhi Darbar were received from the Government of India for presentation to His Highness the Maharaja, Shrimant Yuvaraj Fateh Singh Rao, and to three other gentlemen whom His Highness might be pleased to name. The gold medal for His Highness and a silver medal for the Yuvaraj were handed over by the Resident, Colonel Meade, at the usual Darbar

held at the Lakshmi Vilas Palace on the occasion of the Dasera, on the 30th of September 1903, while the remaining three silver medals were presented by His Highness the Maharaja to the undermentioned gentlemen at a special Darbar held at the Nazarbag Palace, on December 31, 1903 :—

Diwan Bahadur R. V. Dhamnaskar, Diwan. o

Himmat Bahadur Shrimant Anand Rao Gaekwar.

Nawab Mir Mainuddin Hussein Khan.

Certificates of merit, issued by the Government of India in connection with the Delhi Darbar, to Mr. Abbas S. Tyabji, Barrister-at-Law, Puisne Judge of the Varisht or High Court, and to Dr. Balabhai Mangalal, L.M. & S., Superintendent Central Jail, Baroda, were forwarded by the Resident to His Highness's Government for delivery to the recipients in due course. Certificates were given at the Darbar held at the Residency on the 1st of January 1903 to Mr. Jamsedji Ardesar Dalal, M.A., LL.B., Sar Subah or Revenue Commissioner, to Khan Bahadur Dr. Shamsuddin J. Sulemani, L.M., Chief Medical Officer, and to Shet Chimanlal Motilal Samal Bechar, Banker and Merchant of Baroda.

(f)—YUVARAJ FATEH SINH'S MARRIAGE.

On his return from Oxford in 1902, Shrimant Yuvaraj Fateh Sinh Rao, eldest son of His Highness the Maharaja, went direct to Coonoor to see his parents who were staying there. The Yuvaraj had completed his nineteenth year, and His Highness thought that he was of a suitable age to marry. A Committee was accordingly appointed, including His Highness's brother Shrimant Anand Rao Gaekwar ; and the result of the Committee's

work was published in the shape of a book called Vadhu-Vara-Pariksha.

Offers came from many noble families of Poona, Satara, Nagpur, and other places. Yuvaraj Fateh Sinh was allowed his own choice among the girls who were considered eligible, and his choice fell on the daughter of Ramchandra Rao Nimbalkar, a nephew of the Jaigirdar of Phaltan in the District of Satara. The selection was publicly announced in November 1903, and preparations were commenced without delay.

His Highness the Maharaja appointed a Committee, headed by his brother Shrimant Sampat Rao Gaekwar, to arrange for the festivities. The Committee made all the necessary arrangements. Astrologers pronounced three days as specially auspicious. His Highness the Maharaja chose one of these days, the 4th of February 1904, for the celebration of the marriage.

Invitations were sent out in January 1904. Guests came in from the 1st of February. A Camp was formed for Indian guests. Tents were pitched for them in a circle round a garden. An ornamental arch was erected at the entrance. Representatives from Kashmir, Indore, Dewas, Bhaonagar, Rutlam, and other places were accommodated in this Camp. Palaces were assigned to more distinguished guests, His Highness the ex-ruler of Indore, His Highness the Raja of Dhar, and His Highness the Thakore Saheb of Gondal. The total number of Indian guests was about six hundred.

A Camp was formed for the European guests in the College Grounds. A separate building had been assigned for His Excellency Lord Lamington, Governor of Bombay, who had accepted the invitation ;

but pressure of work made it impossible for him to attend. The Hon'ble Mr. Fulton, Colonel M. J. Meade, C.I.E., Resident of Baroda, the Hon'ble Mr. Lawrence, Commissioner of the Northern Division, and other distinguished European guests were present. The total number of European guests was about eighty.

On the 1st of February 1904, the bride and her party made their entry into Baroda. The City was gaily decorated with flags and arches. The bride was received at the Railway Station by the Diwan and all the principal officials, the relations of His Highness, and by Sardars and Darakdars. After the reception at the Railway Station the party went in a procession to the old Palace which had been fixed for the residence of the bridal party. A Durbar was held, and Pan-Supari and scented wafers were presented to the bridal party.

Ceremonies in connection with the marriage commenced on the 2nd of February. In the morning the Sakarpuda ceremony took place at the bride's residence, and the Tila ceremony at the bridegroom's residence. In the evening His Highness the Maharaja, accompanied by the bride's father, went to the Residency to formally invite the Resident. A Darbar was held at the Residency, and customary honours were paid to His Highness.

The 3rd of February witnessed minor ceremonies among the ladies of both the parties.

The 4th of February was the day fixed for the marriage. The whole of the City was gaily decorated. In the morning the Vaknischyaya ceremony took place at the bride's residence. His Highness and the three younger Princes were present at the ceremony. At 5

o'clock in the afternoon the procession commenced from the Lakshmi Vilas Palace. Yuvaraj Fateh Singh Rao was seated on a gold Ambari on an elephant, his beautiful sister taking her seat behind him.

• Then followed His Highness, all the guests, Sardars and Officials on foot. The Resident and other European guests joined the procession. The bridegroom's party and principal guests entered the Marriage Chowk and took their seats in the halls round the Chowk, which were profusely decorated and lighted with electric lights. After the arrival of the bridegroom, the bride came there attended by her maternal uncle. The nuptial ceremonies were then performed. Pan-Supari and scented waters were distributed to all present. His Highness then came to the grand Darbar Hall and after the distribution of Pan-Supari made a short speech thanking all the guests. At night the city was illuminated.

Entertainments provided for the guests commenced from the 5th February. There was a Cheeta hunt in Dhaniyavi Jungle in the morning, and there were military sports on the Varashao Parade Ground in the evening. The city was brilliantly illuminated at night, and at 10 o'clock the procession commenced from the Old Palace, the bride's residence. The Yuvaraj and his lovely consort were seated on a magnificent Ambari, the bridegroom's sister sitting behind them. Then followed His Highness and his party. The procession represented the bridegroom taking away the bride.

On the 6th of February a Darbar was held at the Lakshmi Vilas Palace at 10 o'clock. Deputations from Kashmir, Indore, Dewas, Bhaonagar and other places were present. Addresses from public institutions were

read. The bridegroom received dresses of honour from several guests and deputations. Sir Bhalohandra Krishna of Bombay gave a short address, to which His Highness made a short and eloquent reply. In the evening all the guests went to view the arena sports. At night the European Guests were entertained at a Banquet.

The bulk of the European Guests left on the 7th of February. Indian Guests were entertained at a dinner the same morning.

On the 8th of February there was a gathering of girls at the Nyaya Mandir, and prizes were distributed by the Bride. This was a fitting close to the auspicious festivities.

II.—LEGISLATIVE.

(a)—HISTORY AND PROCEDURE.

A body of laws has grown up in Baroda within the last half century, which are mostly adaptations of laws enacted in British India, with such modifications as the peculiar conditions of the State of Baroda made it desirable to introduce. It is said that the late Maharaja Ganpat Rao caused the first Civil Procedure Code and Criminal Procedure Code to be compiled in 1852 and 1853, *i.e.*, some years before the corresponding Codes were enacted for British India by Lord Canning's Government. The late Maharaja Khande Rao enacted the first Stamp and Registration Acts in 1859; and His Highness also amended the Civil Procedure Code in 1860 on the basis of Lord Canning's Act for British India.

Under the administration of Sir T. Madhava Rao, during the minority of the present Ruler, the existing laws and rules were amended by circulars, but no new laws were passed.

His Highness the present Maharaja took the administration in his own hands in 1881, and formed a Law Committee in 1883, consisting of the Naeb Diwan and the three Judges of the High Court. These Officers passed new Registration and Stamp Acts, and framed a Police Act, based on Lord Canning's Police Act of 1861 for British India.

The work of drafting laws was made over to different officers from time to time after 1890, and the old Law Committee was finally abolished in 1899. The procedure which has been followed in enacting laws during the period under report is described below.

The Diwan or the Naeb, Diwan or some other Officer drafted Bills according to the instructions of the Maharaja. The Bills so drafted were published in the *Ajna Patrika* or Government Gazette of Baroda, and a sufficient time was allowed for public criticism and for obtaining the opinions of different officers. When these were received, a statement of the objections raised in newspapers, or in specific memorials, or in the reports of the officers consulted, was drawn up, and submitted to His Highness together with replies. The Maharaja had thus the advantage of comparing the original Bill with the comments and criticisms, official and non-official. The original Bill was often considerably modified in the light of such criticism, and was then passed into law by the Maharaja's order, and published in the *Ajna Patrika* for general information.

It is interesting to note that one of the three Acts passed in 1904 is for the extension of Primary Education in this State, and another is for the Prevention of Early Marriages. People living outside the limits of this State have an inadequate conception of the degree to which the opinion of the people influences legislation in Baroda. The utmost consideration is shown to such public opinion ; and His Highness the Maharaja consented to reduce the limit of age for the marriage of girls from 14 to 12 in deference to the popular wish. Other modifications were also made in the original Bill, so as to make it less obnoxious to orthodox communities.

It is unnecessary in this report of the past two years to narrate the transactions of the current year. It is enough to mention that the formation of a regular *Legislative Council*, with some seats for Members selected by the people, is at

present under discussion, and may take form before long. As at present framed the bill provides for eighteen Members, two-thirds of whom will be ex-officio Members and Members nominated by His Highness, and the remaining one-third will be elected in the following manner :—

- 4 to be returned by the four Districts.
- 1 " " Baroda Municipality.
- 1 to be elected " Sardars, &c.

It will be a new chapter in the history of this State, and a marked event in the annals of His Highness' progressive administration, when men, elected by the people, will sit side by side with His Highness's trusted officials, to frame laws and regulations for themselves.

(δ)—LEGISLATIVE ACTS.

A list of Acts passed by His Highness the present Maharaja is given below :—

1. The Police Act was enacted in 1884 and amended in 1898.
2. The Registration Act was enacted in 1885 and amended in 1902.
3. The Abkari Act was enacted in 1886 and amended in 1900.
4. The Court Martial Act, 1887.
5. The Stamp Act was enacted in 1889 and amended in 1904.
6. Small Causes Act, 1890.
7. The Municipal Act, 1892.
1895.
8. The General Clauses Act, amended in 1904.
9. Law relating to Possession Suits, amended in 1897.

1896.

10. The Court Fees Act, amended in 1904.
11. The Code of Civil Procedure, amended in 1902.
12. The Easement Act.
13. The Limitation Act, amended in 1903.
14. The Penal Code, amended in 1904.
15. The Code of Criminal Procedure, amended in 1904.

1897.

16. The Maintenance Act.

1898.

17. The Hackney Carriage Act.
18. The Interest Act.
19. An Act for the Inspection of Boilers.
20. The Treasure Trove Act.
21. The Contract Act.
22. The Guardian and Wards Act.

1899.

23. An Act relating to Lunatic Asylums.

1900.

24. The Arms Act.

1901.

25. The Transfer of Property Act, amended in 1902.

1902.

26. The Hindu Widow Marriage Act.
27. The Freedom of Conscience Act.
28. The Opium Act.
29. The Sale of Poisons Act.
30. The Village Munsiffs' Act.

1903.

61. Amendments only to different enactments were passed this year.

1904.

32. The Primary Education Act.
 33. The Infant Marriage Prevention Act.
 34. The Prisoners' Testimony Act.
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III. JUDICIAL.

(a)—CONSTITUTION OF COURTS.

The Varisht Court, answering to High Courts in British Provinces, is the Supreme Judicial Tribunal in this State. At the close of the years under review it consisted of three Judges.

Mr. Abbas S. Tyabji, of the Lincoln's Inn, Barrister-at-Law, was acting as Chief Justice. He completed his education in England, passed the Matriculation of the London University in 1871, and competed unsuccessfully for the Indian Civil Service. Called to the Bar in 1875, he returned to India and practised in the High Court of Bombay for four years; and in 1879 he joined the Service of His Highness the Gaekwar. He is a nephew of Mr. Justice Tyabji of the Bombay High Court, and brings to the performance of his duties a high legal training and knowledge acquired in England and at Bombay, and a valuable experience of this State obtained during a long service of twenty-five years. He accompanied His Highness the Maharaja to Europe in 1888 and in 1894, and was appointed to the Varisht Court on his return in the same year. Since December 1903 he has acted as Chief Justice.

Mr. Vinayak Mahadeo Pandit, who was the Second Judge of the Varisht Court, passed the LL.B. Examination of the Bombay University in 1875, and practised at Bombay till 1884, when he joined the Baroda Service. Three years after, he was promoted to the rank of a District Judge. He became an Acting Judge of the Varisht Court in 1892, held the important post of Naeb Diwan from 1895 to 1901, and became a permanent Judge of

the Varisht Court in 1901. His experience as a Revenue and Executive Officer, and his marked ability as a Judicial Officer, make him a valuable servant of the State.

Mr. Krishanarao Vinayek Sharangpani, who held the post of Third Judge of the Varisht Court at the close of the period under review, passed the LL.B. Examination of the Bombay University in 1879, and joined this State in the following year. He, too, obtained a valuable experience in this State by serving as a Judicial Officer in districts for fourteen years, and then rose to the rank of Judge of the Varisht Court.

The Varisht Court has been described as the Supreme Tribunal in the State. Nevertheless, the Maharaja has the power of revising the decisions of the Varisht Court; and in the exercise of this power His Highness is advised by the Nyaya Sabha, answering to the Privy Council. At the close of the period under review, the Nyaya Sabha consisted of the Naeb Diwan, Mr. Bhandarkar, and of two other high Officers of State.

Under the Varisht Court there is a District Judge in each of the four Districts. Each District is divided into some eight Talukas (more or less,) and there is a Judicial Officer called Munsiff in each Taluka. The Munsiffs in the State possess a thorough legal training and are generally men who have obtained the LL. B. degree of the Bombay University.

(b)—SEPARATION OF JUDICIAL AND EXECUTIVE FUNCTIONS.

For several years past His Highness the Gaekwar has endeavoured to bring about a separation of the Judicial and Executive duties. The Taluka Executive Officers

(Vahivatdars) used to try all criminal cases in years past, while the Taluka Judicial Officers (Munsiffs) took cognizance of civil cases. This arrangement was open to many objections. In the first place, the Vahivatdars were unable to devote that degree of attention to their executive and revenue work which it needed, when much of their time was taken up in trying criminal cases. And in the second place the exercise of criminal powers spoilt them as revenue officers, and armed them with an authority which was inconsistent with the discharge of their revenue duties.

The Maharaja did not, however, desire to introduce any sudden change. He discussed the matter with the highest Officers of State, and their recorded opinions show a thoughtful consideration of all the various aspects of the question. The literature on the subject is both instructive and interesting.

After a careful consideration of all these opinions, and with his intimate knowledge of the actual work of administration as it is carried on in Districts and Talukas, the Maharaja came to the conclusion that a separation should be effected. The Officer who is virtually the prosecutor should not be the Judge. The Officer who is virtually the plaintiff in the matter of revenue demands should not exercise Magisterial powers. The Officer who is the Head of the District or the Taluka should be free from the suspicion of doing executive work with the help of criminal powers. On these considerations His Highness resolved on a separation of functions.

The policy was cautiously and gradually carried out. It was directed that three-fourths of the criminal cases

should be tried by Munsiffs, and one-fourth only should be tried by Vahivatdars. The bulk of the criminal work was thus made over to trained Judicial Officers who performed no executive or revenue work ; a small portion of the work was still left in the hands of the executive and revenue officers. And this state of things continued till the end of the year under report.

Since then, a complete separation has been effected. The work of Revenue and Executive Officers has largely increased in this year of scarcity and famine, and the Maharaja has directed that they should be relieved of all criminal work. From the current year, therefore, all criminal and civil work will be performed by Judicial Officers ; the Revenue and Executive Officers will devote all their time to their legitimate duties.

(c)—OTHER JUDICIAL REFORMS.

A very interesting and instructive note, recorded by the Acting Chief Justice Mr. Abbas Tyabji, clearly points out the main considerations which have determined the judicial policy of the State in recent years. These considerations are (1) uniformity and certainty in laws and procedure ; (2) despatch in the disposal of judicial work ; (3) co-operation of the people in judicial work.

The laws enacted between 1895 and 1900 have, to a large extent, secured the first object. There is now a uniform and definite procedure followed in civil and criminal courts. Judges and the public know what the penal laws are. The people know what their rights and liabilities are with regard to contracts and the transfer of property. Fraudulent dealings have been minimised by the Registration Act. And a Code of Hindu Law for this State, now under preparation, is likely to lessen litigation, and to settle many controversial points.

The second object has not yet been fully secured. Strenuous efforts have been made, during the two years under review, to dispose of old cases. The balance of old cases at the end of July 1904 shows a great improvement over previous balances. Nevertheless, the average time taken for the disposal of cases has been unduly long during these two years, and the despatch of judicial work in Baroda still compares unfavourably with that of British Courts in the Bombay Presidency.

For the attainment of the third object in view, it was directed in 1901 that the trials of criminal cases of certain description should be held with the help of Assessors in two Districts of the State. The experiment proved successful ; the order was extended to the other two Districts ; and the adoption of the jury system is now under contemplation.

With the same object in view, an Honorary Village Munsiff, with power to decide suits up to the value of Rs. 60, was appointed in August 1903. Intelligent Patels or Village Headmen have been empowered to try cases relating to petty thefts of agricultural produce, assault, simple hurt, conservancy, etc., and to award punishments extending to a fine of Rs. 5, or imprisonment for 48 hours. The results of these experiments are watched with keen interest. And it is the desire of His Highness to extend this system of obtaining the co-operation of the villagers themselves in settling their own petty differences, and of saving the people from the trouble, the expense, and the demoralizing effects of attending Law Courts.

Lastly, with the object of keeping the administration in touch with the people, His Highness the Maharaja Gaekwar directed a Judicial Conference to be held in

every District. The District Judge was to preside, and Munsiffs, Magistrates and Pleaders were to attend. Many interesting facts were elicited at the Conference held last March, and amendments of laws were suggested which are still under consideration. It is a notable feature of these Conferences that they were not purely official; pleaders who knew the requirements of the people whom they represented in Court were invited to attend and help the discussions. And as such Conferences were held simultaneously in all the four Districts, a comparison of the suggestions made by them led to clear conclusions as to the requirements and needs of the people.

The Madras system of a careful scrutiny of all judgments passed by Lower Criminal Courts led to the discovery of hasty prosecutions instituted by the State which ended mostly in acquittals. To remedy this evil the Maharaja has empowered the Legal Remembrancer to appoint properly qualified Prosecutors in most of the Courts. It is expected that this will lead to a more efficient conduct of cases, and would save the people from ill-judged prosecutions.

(d)—JUDICIAL STATISTICS.

Number of Courts at the close of the period under review.

Varisht Court	...	...	...	...	1
Sadar Court	...	...	...	...	1
District Judges' Courts	...	...	...	...	4
Assistant Judges' Courts	...	...	...	...	3
District Magistrates' Courts	...	...	...	...	4
Taluka Courts, etc.	...	...	...	...	24
Subordinate Magistrates' Courts	...	...	...	...	110
Village Courts	...	...	...	...	3
					<hr/> 150

Total Civil Suits.

Year.	Filed.	Disposed of including old pending cases.
1902-03.	21,004	17,821
1903-04.	16,819	19,099

These figures show a considerable improvement in the disposal of cases during the last year. The number pending at the end of 1902-03 was 7,340. The number pending at the close of 1903-04 was 5,351. Of the cases which remained pending at the close of the last year, only 779 were more than a year old. The total of civil suits is divisible into Ordinary Civil suits and Small Cause suits, as shown in the two following tables:—

Ordinary Civil Suits.

Year.	Filed.	Valuation in Rupees.	Disposed of including old pending cases.	Average duration of contested cases.	Pending at the end of the year.
1902-03 ..	10,368	23,18,805	7,953	25	5,191
1903-04 ..	4,718	18,13,087	7,438	301	2,697

While the number of pending cases was greatly reduced at the close of the last year, as compared with the previous year, the average duration of contested cases was much longer. There is a great room for improvement in this respect; and it is hoped that parties in ordinary

original civil suits will not have to wait three hundred days in future to have a decision from the Baroda Courts.

Small Cause Suits.

	Filed	Valuation	Number including old suits	Average duration of contested cases.	Pending at the end of the year.
1902-03	10,636	6,76,924	9,868	99	2,149
1903-04	12,101	8,24,045	11,666	121	2,654

Here again is found a great falling off in respect of the despatch of an average contested case. A Small Cause suit should not on the average take four months.

Execution of Decrees.

Year.	Applications.		Valuation in Rupees.		Disposed of including old pending applications.		Average duration	
	Ordinary suits.	Small Cause suits.	Ordinary suits.	Small Cause suits.	Ordinary suits.	Small Cause suits.	Ordinary suits.	Small Cause suits.
1902-03	9,831	8,420	27,38,034	5,57,055	9,529	8,367	217	96
1903-04	10,049	9,270	24,92,147	5,64,796	11,020	9,284	230	98

The average time taken for disposing of an application for execution of decree both in ordinary suits and in small cause suits was longer in 1903-4 than in the preceding year.

Civil Appeals.

Year.	Filed.	Valuation in Rupees.	Disposed of including old pending Appeals.	Pending at the end of the year.	Average duration.	
					Contested cases.	Other cases.
1902-03	907	2,04,890	1,175	1,231	444	259
1903-04	1,155	2,91,375	1,274	1,174	380	374

Once again it is the "law's delay" that strikes one. The patient appellant must make up his mind to wait for a period of over twelve months before he can hope for a decision. And if this is the average time, the time taken in specially heavy cases must be immensely longer.

Result of Civil Appeals.

Year.	First Appeals decided by Varisht Court.			Second Appeals decided by Varisht Court.			Appeals decided by District Courts.		
	Percentage affirmed.	Percentage reversed or remanded.	Percentage confirmed.	Percentage affirmed.	Percentage reversed or remanded.	Percentage confirmed.	Percentage reversed or remanded.		
1902-03	50	39	11	51	40		52	35	13
1903-04	45	46		58	28	14	50	35	15

The proportion of first appeals in which cases were remanded for re-trial or the decrees reversed by the Varisht Court was very large in the last year.

Criminal Cases.

Year.	Filed.	Disposed of including old pending cases.	Average duration, ordinary cases.	Average duration summary
1902-03	9,166	10,164	19	8
1903-04	9,045	9,647		13

Although the average duration of cases was longer in the last year than in the previous year, yet on the whole there is not much reason for complaint if an average case takes 3 weeks. A case dealt with summarily ought not to take two weeks. The number of persons tried last year was 19,302 against 18,051 in 1902-3.

Percentage of different classes of offences. .

Year.	Against property.	Against person.	Against public justice.	Against tranquillity.	Against marriage.	False documents.	Against coinage.	Against public servants.	Other offences.
1902-03	34	23	1	3	2	33	65	81	36
1903-04	29	27	1	3	2	19	03	81	34

In both years over one-half the offences were against property or against person. The more serious cases in 1903-04 were 45 of murder, 43 of culpable homicide, 75 of grievous hurt, 6 of rape, 88 of dacoity, 104 of robbery, 237 cases of house-breaking and theft, and 13 cases of forgery.

Percentage of conviction among prisoners actually tried.

Year.	Convicted.	Acquitted.
1902-03	41	59
1903-04	39	61

The total number of witnesses examined in the last year was 18,765 against 21,520 of the previous year.

Punishments.

Year.	Capital Sentence.	Fines only.	Imprisonment with or without fine.	Imprisonment with whipping.	Whipping only.	Ordered to find security.
1902-03 .		2,296	2,172		94	
1903-04..		2,310	1,387		46	21

Of the persons convicted, 3,449 were males and 245 were females.

Appeals.

Year.	Filed and old pending appeals.	Disposed of.	Percentage of cases in which sentence was confirmed.	Percentage of cases in which sentence was modified.	Percentage of re-trials &c.
1902-03 ...	864	821	53	19	28
1903-04 ...	876	813	60	15	25

The percentage was more satisfactory last year than in the year before.

INCOME AND EXPENDITURE.

Civil and Criminal Courts.

Year.	Income from Stamps, Court fees &c., in Rupees.	Expenditure.
	Rs.	Rs.
1902-03	3,24,909	3,60,544
1903-04	2,94,659	3,54,262

There was a considerable decrease in income in 1902-03 as compared with the previous year.

The number of men surrendered to this State, and by this State, in Extradition cases during the two years under review is shown in the following table :

Extradition Cases.

Year.	Surrendered to Baroda.		Surrendered by Baroda.	
	Cases.	Men.	Cases.	Men.
1902-03	128	311	108	219
1903-04	103	208	70	122

Including pending cases, 337 extradited men were tried in Baroda in 1902-03 ; and of these 171 were convicted, 155 were acquitted, and 11 men remained to be tried in the following year. Including these 11 men, the total number of extradited men for trial in 1903-04 was

219; and of these 103 were convicted, 89 were acquitted, and 29 remained to be tried in the current year.

Pleaders and Mukhtiar.

The number of pleaders and Mukhtiar in the several Courts of the State was 377 at the close of the period under report. Special Sanads were granted in 1903-04 to 38 pleaders of British Courts to practise for specified periods in the Varisht Court and the Courts subordinate to it in the State.

IV.—REVENUE.

(a)—CONSTITUTION OF THE DEPARTMENT.

The Revenue Department comprises Land Tax and other Taxes, Customs, Exoise and Opium, Registration and Stamps, Agriculture, Industries and Forest, Boundaries Inspection and Sanitary Inspection. Some of these twelve Sub-Departments are only remotely connected with Revenue ; but as all of them are reckoned portions of the Revenue Department, it is necessary to deal with them all in this Section.

Diwan Bahadur Vasudeo Mahadeo Samarth, was in charge of this vast Department with its twelve Sub-Departments at the close of the period under review. He joined the service of the State in 1879, and was sent to Europe in 1884 in charge of the Maharaja's brother and cousin and another young student. Mr. Samarth afterwards accompanied the Maharaja on his first visit to Europe in 1887, and was present at His Highness's interviews with Her Majesty the late Queen-Empress. In 1892, he proceeded to Europe for the third time as Secretary to His Highness. His last visit to Europe, in 1901, was undertaken with the laudable object of studying industries and agriculture. He visited the Glasgow Exhibition, inquired into the state of the Irish Cottiers in Galway and Connemara, and paid some attention to dairy farming at Cork. With his natural abilities and education which are of a high order, with his unwavering sympathy for the people, and with his long experience in this State and the information he has gathered abroad, Mr. Samarth makes an invaluable Revenue Officer. In 1898 the British Government bestowed on him

the personal distinction of Diwan Bahadur for his meritorious work in combating famine and plague in this State.

As Sar-Subah or Revenue Commissioner Mr. Samarth is the Head of the four Subhas or District Officers. The word Subah really means a Province or District; but in Baroda the word is used to mean a District Officer. Two of these Subahs are Shrimant Sampatrao and Mr. Khasherao Jadav whom Mr. Samarth accompanied to Europe twenty years ago. The third Subah is Mr. Yusafali, a Mahomedan gentleman and a Barrister-at-Law. And the fourth is Mr. Kazi Abdur Rahman, another Mahomedan gentleman who has made himself extremely popular in his District.

Each District is again divided into a number of Talukas as the following table will show:—

District.	Taluka.
Baroda.	1. Baroda. 2. Petlad (with Siswa). 3. Padra. 4. Choranda. 5. Sinor. 6. Dabhoi. 7. Sankheda (with Tilakwada). 8. Vagodia. 9. Saoli.
Naosari.	10. Naosari. 11. Gandevi. 12. Mhuva. 13. Vyara. 14. Songad (with Vajpur). 15. Velachha (with Vakal). 16. Kamrej. 17. Palana.
Kadi.	18. Mehsana. 19. Kadi. 20. Kalol. 21. Dehgam (with Atarsamba). 22. Vijapur. 23. Visnagar. 24. Kheralu. 25. Sidhpur. 26. Patan (with Harij). 27. Vadaoli.
Amreli.	28. Amreli (with Bhimkata). 29. Damnagar (with Shianagar). 30. Dhari (with Khamba). 31. Kodinar. 32. Okhamandal (with Beyt).

The District Officer or Subah is assisted by one or two or three Assistants called Naeb Subahs. When the Subah has more than one Naeb Subah under him, the Talukas are so grouped that each Naeb Subah is in charge of a number of them. The duty of Naeb Subahs consists largely in inspecting the records and work of the Talukas, and in helping the District Officer in keeping the administration well in hand. Without such help the most energetic District Officer would find it impossible to thoroughly control the work of the eight or ten Talukas comprised in a large District.

Each Taluka is under the administration of a Vahivatdar, answering to a Mamlatdar in British India. To visit the villages in his Taluka, to collect the land revenue and taxes, to inspect the boundary marks set up to demarcate field from field, to protect Government property and Government interests, and generally to maintain peace and order within his Taluka, are the main duties of the Vahivatdar. A portion of the criminal work of the Taluka also fell to his share; but, as has been stated before, all judicial work has now been transferred from the Vahivatdar to the Munsiff.

Each Taluka comprises fifty to a hundred villages, and the village is the basis of Indian political organization. Self-governing villages, with their complete arrangements for civil and criminal justice, their revenue collection, and their hereditary professional services, were the foundations of old Indian Society. The genius of the Indian people developed this system as suited to their wants and requirements, and through thousands of years, while dynasties came and went and empires rose and fell, the villagers were content with their primitive

Self-Government within their self-contained little Republics. Much of this form of Self-Government has now unfortunately ceased to exist; a more centralised administration has withdrawn the judicial functions of village elders; and a new system of land revenue settlements has disturbed and demolished the old fiscal arrangements in every village. No study in connection with modern Indian History is more deeply interesting than the study of this silent and far-reaching change, this replacing of village administration by a centralised administration. And no administrative problem in Baroda, or in British India, has a higher importance than the problem of reconstructing some effective system of Self-Government, after the old Self-Governing institutions have been swept aside. This subject will be dealt with further on, in a separate Section.

(b)—LAND TAX.

The collection of the Land Revenue depends largely on the annual rainfall and the state of the crops, and fortunately the conditions were fair in 1903-04, and far better than in the previous year. The rainfall during the two years is shown in the table given below :—

Rainfall.

District.			Normal rainfall in Inches.	Rainfall in 1902-03 in Inches.	Rainfall in 1903-04 in Inches.
Baroda	...	...	32	29·90	38·66
Kadi ...	...	...	32	25·20	21·68
Naosari	...	...	48	54·87	55·12
Amreli	...	...	25	22·16	24·58

It will be seen from these figures that the rainfall was scanty everywhere in 1902-1903 except in Naosari ; while in 1903-1904 it was normal or copious everywhere except in Kadi. Crops suffered in many Talukas in Kadi, last year, on account of this scanty rainfall ; while in some Talukas of Baroda and Amreli the rains were not seasonable.

Locusts also appeared in all the four Districts last year, and did some damage to the crops. Cotton and sesamum crops in Kodinar Taluka in Amreli District were considerably damaged by rats. Otherwise the conditions were good. There was no crop disease to speak of, and the water supply was generally good in all the four Districts. The outturn of all the crops was between 8 and 12 annas in Baroda, Naosari and Amreli ; while in Kadi, on account of scanty rainfall, it was generally between 6 and 9 annas only. The following table shows the prices of the staple crops during the two years under report. The figures show the number of local Seers (of 40 tolas) per rupee. The Baroda Seer is about 1 lb., or about half the weight of the ordinary Indian seer.

Prices of Food Grains.

District.	Wheat.		Bajri.		Rice.		Pulse.		Jowar.		Gram.	
	1902-03	1903-04	1902-03	1903-04	1902-03	1903-04	1902-03	1903-04	1902-03	1903-04	1902-03	1903-04
Baroda ...	Srs. 20½	Srs. 22½	Srs. 34½	Srs. 38	Srs. 19½	Srs. 19½	Srs. 19½	Srs. 20	Srs. 36½	Srs. 45½	Srs. 22	Srs. 22
Kadi ...	23	30	32½	38½	15	15½	18½	18½	35½	49	26½	28½
Nasari ...	19½	25½	31½	36½	19½	21½	17½	21	35½	41½	22½	27½
Amreli ...	23½	27½	31½	35½	16	14½	14	14	39½	50½	22½	25½

All grains, and specially Bajri and Jowar, which are the staple food of the mass of the people, were cheaper in 1903-04 than in 1902-03. Collections of revenues from land accordingly increased from 80 lacs in 1902-03 to 83 lacs in 1903-04.

When a Settlement or Revision Settlement of a Taluka is made, the Jamabandi or Land Revenue Demand of every village in the Taluka is prepared by the Settlement Department, and made over to the Revenue Department. Alterations then take place from year to year, as waste land is brought under cultivation, or cultivated land is abandoned, or other changes take place in villages; and the Revenue Department takes note of these annual alterations, and revises the Jamabandi for each year. It is the village Talati or Accountant who takes note of these annual changes, and prepares his *Pahani Patrak* or Inspection Report; it is the Circle Inspector who checks it by comparing the entries with the actual changes in the village; and it is the Vahivatdar of the Taluka who then prepares a *Tharao Band* or Statement of Revenue Demand for each village within his Taluka. It is thus that a new Jamabandi or Revenue Demand is made by the Revenue Department every year for all the three thousand villages in the State, excepting those which are actually under settlement. The Jamabandi of 2,641 villages was thus prepared by the Revenue Department in 1903-04, while 322 villages were in the hands of the Settlement Department.

The Land Revenue Proper and Miscellaneous Land Revenue Demands of the State, during the two

years under report are shown in the table given below :—

Land Revenue Demand.

District.	Land Revenue.	Miscellaneous Revenue.	Land Revenue.	Miscellaneous Revenue.	Remarks.
	Rs.	Rs.	Rs.	Rs.	
Baroda ...	28,75,332	5,17,321	28,50,314	4,48,187	For villages the Jama-bandi of which was not prepared, estimated figures are given for the year 1903-04.
Kadi	26,00,219	4,55,753	25,74,674	4,70,515	
Naosari...	14,74,719	1,68,888	14,72,051	1,53,825	
Amreli ...	7,98,469	61,688	8,05,365	46,798	
Total...	77,48,729	11,78,650	77,02,404	11,19,325	

It will be seen from this table that there was a decrease of Rs. 46,335 in Land Revenue and of Rs. 54,325 in Miscellaneous Revenue in the last year as compared with the previous year. The decrease in the first item is mainly owing to the fact that more lands were relinquished than were taken up. The decrease in the last item is owing to the fact that the proceeds of the Local Cess was removed from this head and shown separately.

Remissions amounting in all to Rs. 49,285 were allowed in 1902-03, and Rs. 38,283 in 1903-04, from the above demands. Deducting these remissions, the net Revenue Demands were Rs. 88,73,104 for 1902-03 and Rs. 87,88,447 in 1903-04. The collections during these two years are shown below, District by District.

Demand and Collection.

District.	1902-1903.		1903-1904.	
	Net Demand.	Net Collection.	Net Demand.	Net Collection.
	Rs.	Rs.	Rs.	Rs.
Baroda ...	33,88,579	31,22,055	32,95,883	31,55,729
Kadi ...	29,86,684	25,17,789	30,21,029	27,93,002
Naosari...	16,39,725	16,03,623	16,21,658	16,01,485
Amreli ...	8,58,116	7,79,780	8,49,877	7,85,939
Total ...	88,73,104	80,23,247	87,88,447	83,36,155

It will be seen that the collection in Naosari District, which is seldom visited by droughts, were almost cent. per cent. for both years. In the other Districts, the collections for 1903-04 were better than in the previous year, because the climatic conditions and produce were better in the last year. The hard working, frugal and simple Kheruts or cultivators of Baroda will compare, not unfavourably, with the best races of cultivators on earth, both for the patience and care with which they till their lands, and for their honesty in meeting their liabilities when they can. Men and women, and often the children of the family, are seen in the fields day and night, nursing the crops, or driving away birds from the ripened grain. Bajri and Jowar, the food of the common people, are grown on the ordinary field; wheat and other valuable crops are raised on carefully irrigated fields; and the bullocks employed for drawing water from the irrigation wells are not more patient or uncomplaining than the cultivators who employ them.

But successive bad seasons have reduced them to poverty, and a fixed revenue demand in cash has thrown them into the hands of the money-lender.

1,69,365 notices to pay up the instalments of revenue due were issued in 1902-03, and 1,13,628 in 1903-04, showing a great improvement in the last year. Since the close of the year the fees for notices have been reduced, and no fees are charged unless notices are actually issued. It is a matter of regret, that sales of property for arrears rose from 1,203 in 1902-03 to 1,757 in 1903-04, and that imprisonment for such arrears increased from 399 to 514. Fines, however, decreased from 518 to 216 cases. It will appear from the above figures that, in ninety-nine cases out of a hundred, the cultivators pay up on receipt of notices, and no coercive measures are required.

The following table will show the lands relinquished, and the new lands taken up, during the years under report :—

Lands Relinquished and Taken Up.

Years.	Land Relinquished in Bighas.	Assessment in Rupees.	Land taken up in Bighas.	Assessment in Rupees.	REMARKS.
1902-03	43,107	58,140	89,157	54,545	14 Bigha = 1 acre.
1903-04	38,160	45,923	88,409	87,894	

As the year 1902-03 was unfavourable, more land was relinquished than was taken up. The last year was more favourable to the crops, and so much land was taken up.

More than a hundred thousand acres of land change hands every year among the cultivators, and the following figures throw some light on the character of their transactions :—

Transfer of Lands.

Years.	Transfer by Partition, Inheritance, Gift or exchange in Bighas.	Transfer by Mortgage, Redemption or Sale, &c., in Bighas.
1902-03	1,69,017	41,218
1903-04	2,31,024	69,645

It is satisfactory to know that more than half the transfers were by inheritance, the figures being 1,65,016 Bighas for 1902-03, and 2,25,044 Bighas for 1903-04. Under the old rule a security used to be taken from the heirs who inherited the holdings, but this needless restriction has been abolished by His Highness the Maharaja.

Equally liberal and beneficent has been the Maharaja's policy in making advances to cultivators for the improvement of their lands, or for purchasing seeds, implements, bullocks, &c. The amounts so advanced during the two years under review were Rs. 2,50,925 in 1902-03 and Rs. 2,60,522 in 1903-04.

Such advances have been made from year to year, and specially during years of scarcity. The Maharaja trusts his cultivators, and the cultivators are not unworthy of the trust. Whenever the year is prosperous, and the crops are good, large portions of such Tuccavi advances are realised without any difficulty with the Land Revenue. But the last seven years have been more or

less unfavourable, and not only large sums of Tuccavi advances still remain unrealised, but the Land Revenue itself is heavily in arrears. The following statement will show that the total arrears of Land Revenue at the close of the period under review was over ninety lacs of Rupees :—

Arrears of Land Revenue.

District.			Arrears in Rupees.	Surplus payments in Rupees.
Baroda	...	...	36,29,802	716
Kadi	...	...	38,49,371	116
Naosari	...	...	4,08,074	2
Amreli	...	...	11,20,725	18
Total			90,07,972	847

Remissions of unrealised arrears are allowed, year after year, according to rules after enquiry into each individual case. Larger remissions on a liberal and comprehensive scale, in consideration of the present condition of the cultivators and of these successive years of scarcity, are under contemplation in the current year.

(c)—OTHER TAXES.

Veros.—A large variety of taxes were levied in this State under the name of *Veros* from olden times. A list, containing the names of no less than 68 *Veros*, has been prepared; but it will suffice for our present purposes to indicate their general character, and to specify the three great classes into which they may be grouped.

In the first class come the *Veros* which were levied on people for residing in villages. Where this tax was levied for homestead lands it was of the nature of rent. When it was raised per head of cattle under the name of *Puchhi Vero* or *Bakra Charai* it assumed the character of an income-tax on cowherds and shepherds. But it was often levied from people who neither owned cattle nor occupied Government land, and then it was only a sort of poll-tax, or a tax for using the water of the village well.

In the second class may be included all *Veros* on trades and professions. The village carpenter and blacksmith, the trader and the confectioner, the goldsmith and even the leather tanner, had all to pay their various *Veros*, however poor their incomes might be.

In the third class falls the pilgrim tax of the far famed shrine of Dwarka, including the license fee for gathering conch-shells in the same place.

Income-tax.—His Highness the Maharaja wisely decided to replace most of these vexatious taxes by a comprehensive income-tax on a simple and uniform plan. In 1897-98 the income-tax was introduced in the whole of Baroda District, except the town of Baroda and the Talukas of Petlad, Siswa and Chandod. In 1901-02 it was extended to the town of Baroda and to the towns of Vadnagar, Visnagar and Gunja, and also to the Taluka of Kalol.

The introduction of the income-tax in the town of Baroda gave rise to much complaint, and a Committee was appointed to fix the scale on which the tax should be levied in future. After much deliberation the Com-



mittee fixed two different scales, one for towns and one for villages. And this is how matters stood at the close of the period under review.

The inequality of the two scales was so glaring that a further revision was inevitable. Accordingly, the whole question of the imposition of income-tax was reconsidered, and a uniform scale was proposed by the Revenue Minister in October 1904. And this new scale, which is given below, was introduced throughout the State with effect from the commencement of the current year, 1904-1905 :—

Annual Incomes.	Annual Tax.
Under Rs. 300 	' No Tax.
Rs. 300 to under Rs. 500 ...	' Rs. 3
" 500 " " " 750 ...	" 6
" 750 " " " 1,000 ...	" 10
" 1,000 " " " 2,500 ...	" 15
" 2,500 " " " 5,000 ...	" 30
" 5,000 " " " 10,000 ...	" 50
" 10,000 " " " 15,000	" 75
" 15,000 and above... ...	100

The advantages of this new system are—(1) It makes a clean sweep of all the numerous and oppressive Veros described above except rent for homestead lands and the pilgrim tax. (2) It exempts the poor from taxation. (3) It imposes on the richer classes a proportionate burden which they had evaded before. (4) It imposes on official classes their fair share of the burden

which they had escaped. (5) It makes no distinction between towns and villages or between different classes of the Maharaja's subjects. It is a moderate tax, approximating to one per cent. on the income, or about $2\frac{1}{2}d.$ in the pound as it would be described in England, which all subjects of His Highness down to those who earn Rs. 800 a year, are able to pay without any hardship.

The total proceeds of the income-tax is expected to be about a lac of Rupees in the State.

Local Cess.—No Local Cesses were imposed when the new system of survey and settlement was introduced in the State. But when about one-half the State had been settled, the idea of imposing a Local Cess, as is done in British India, was conceived and reduced into practice. The Cess was at first amalgamated with the Land Revenue; but as it was the Maharaja's desire to create Local Boards for the purpose of introducing Self-Government in local matters, His Highness directed in 1903-04 that the proceeds of the Local Cess should be separated from those of the Land Revenue. This order was only partially carried out during the last year, and will be fully carried out in the present year.

Some of the Talukas, comprising nearly one-half of the State, will come in for Revision Settlement between the next three years. With respect to these Talukas, His Highness has directed that the Local Cess should be imposed only on alienated lands, and that Khalsa or assessable lands should be exempt from Cess until these last come in for re-settlement. It thus happens that in one-half of the State the Local Cess is levied on all lands—Khalsa and alienated,—while in the other half the Cess is levied only from alienated

lands. This will be clear from the following tabular statement :—

District.	Extent to which Local Cess is levied.	REMARKS.
Baroda ..	Cess levied only from alienated lands and villages.	Garassias who are under the protection of the British Government pay no Cess on the alienated lands which they hold.
Kadi ..	In Sidhpur, the Cess is levied from alienated lands and villages only. In other Talukas it is levied from all lands.	
Naosari, ..	In Vyara the Cess is levied from alienated lands and villages only. In the other Talukas it is levied from all lands.	
Amreli ..	It is levied from all lands in Okhamandal. In other Talukas it is imposed on alienated lands and villages only.	

The demand and collection of the Local Cess for the year 1903-04 is shown in the following statement, District by District :—

District.	Demand in Rupees.	Collection in Rupees.
Baroda	1,45,159	79,973
Kadi	1,31,429	59,648
Naosari	1,02,172	1,00,231
Amreli	13,081	2,669

3,91,791

(d)—CUSTOMS.

The Abkari Superintendents of the Kadi and Baroda Districts have direct charge of the Customs for their respective Districts. In Amreli, the District Officer is the head of the Customs for his District. In Naosari, there is very little work connected with the levy of Customs, and the Abkari Superintendent exercises supervision over this work.

During the years under report the Customs Revenue of the whole State was collected departmentally, except in the towns of Amreli, Dhari and Dhamnagar in the Amreli District, and in the towns of Songad, Vyara and Kathor of the Naosari District. In these six places, the Customs Revenue was farmed out by auction.

The following is a comparative statement of Customs Revenue derived in the six places named above during 1902-03 and 1903-04 :—

Town.				1902-03.	1903-04.
				Rs.	Rs.
Amreli	...	...	...	9,001	10,001
Dhari...	...	...	...	653	1,011
Dhamnagar	...	...	...	1,201	2,201
Vyara...	...	...	...	2,231	3,150
Kathor	...	...	...	1,645	2,555
Songad	...	...	...	710	1,057
Total				15,441	19,975

The following table gives the total demand and collection of Customs during 1902-03 and 1903-04 :—

District,	1902-03.		1903-04.	
	Demand.	Collection.	Demand.	Collection.
	Rs.	Rs.	Rs.	Rs.
Baroda	3,79,630	3,78,511	3,87,606	3,86,205
Kadi	1,52,806	1,52,806	1,66,673	1,66,673
Naosari	13,471	13,190	17,986	17,981
Amreli	51,591	51,561	50,072	50,050
Total	5,97,698	5,96,068	6,22,337	6,20,909

Thus there was an increase of the revenue in the Kadi, Baroda and Naosari Districts in 1903-04 over that in 1902-03, a result due to good harvests. The large increase in the Kadi District was, also, partly due to the fact that the revenue had considerably fallen off in the previous year.

The following table shows the expenditure incurred during the two years under report :—

District.				1902-03.	1903-04.
				Rs.	Rs.
Baroda ... ..	...	...	...	35,489	38,016
Kadi ... ..	...	...	...	30,300	31,014
Naosari ... ..	...	...	...	1,280	1,054
Amreli ... ..	...	...	...	9,769	9,105
Total				76,838	79,189

A radical change was introduced in the Customs duties after the close of the years under report. A brief mention of the change in the present report will suffice. The principles which were followed in introducing this change are these : (a) A large number of harassing duties on petty articles were abolished ; (b) All export duty was abolished except on Cotton and Mahua flower from Baroda District ; (c) Import duties on frontiers of the State were retained on certain articles generally used in the country, and these articles were not subjected to any fresh duty on entering towns ; (d) Octroi duties were retained on certain other articles generally used by townspeople ; (e) *Ad valorem* duty was abolished altogether and all Customs were levied on articles by the weight without unpacking goods ; (f) The vast body of Nakadars was reduced by about 150 officers and the pay of those retained was improved ; (g) Instructions were issued forbidding the search and harassment of travellers, while protecting the revenue of the State.

As a result of these changes duties were retained on the following articles only :—

Export Duty,

- | | |
|------------------|----------------------------|
| 1. Cotton, | } in Baroda District only. |
| 2. Mahua flower, | |

Import duties on the frontiers. Octroi duties in towns.

- | | |
|-----------------------------|--------------------------|
| 1. Jaggery Sugar. | 1. White Sugar and Candy |
| 2. Groceries and Spices. | 2. Butter and Ghee. |
| 3. Kerosine Oil. | 3. Oils. |
| 4. Salt. | 4. Oil seeds. |
| 5. Beer, Wines and Spirits. | 5. Tobacco. |
| 6. Apparel. | 6. Paper. |
| 7. Metalware and Metals. | 7. Furniture. |
| 8. Timber, &c. | 8. Grass and firewood. |

It should be added that this revised tariff was introduced throughout the State of Baroda from 1st November 1904

except certain isolated towns and talukas which still protect themselves by special tariff. These last are now under revision. The credit of working out the details of this important fiscal reform, and of making practical and valuable suggestions to liberate the trade and the people from much harassment, is largely due to Mr. Raojibhai B. Patel. Like many other promising young men, he was sent to Europe, years ago, by His Highness the Maharaja at State expense; he learnt agriculture at Cirencester and sugar manufacture in Germany; and he came back to India in 1892 with the title of M. R. A. C. of Cirencester and of M. R. A. S. E. of the Royal Agricultural Society of England. His Highness placed Mr. Patel in charge of the Customs, Excise, Opium, and other offices in August 1904, and soon after this, Mr. Patel helped the Revenue Minister in carrying out the Tariff Reform described above.

(e)—EXCISE.

The principal sources of Abkari Revenue are given below :—

1. Manufacture and sale of country liquor.
2. Extraction and sale of toddy.
3. Fees for licenses to sell imported foreign liquor.
4. Manufacture and sale of intoxicating drugs, such as Bhang, Ganja, &c.
5. Miscellaneous.

In Baroda and Naosari Districts, the still-head duty and central distillery system were in force. The out-still system prevails in Amreli. In the Kadi District, too, the out-still system was in force in 1902-03, but in 1903-04 the central distillery system was introduced by order of His Highness. Under this system the liquor is manufactured at a central still, and is issued

on payment of duty for retail sale at the different shops, and the right of manufacture and sale is sold out to the highest bidders.

The sums for which the sale of liquor was farmed are shown below :—

Year.	Baroda.	Naosari.	Kadi.
1902-03	1,23,270	3,73,080	35,000
1903-04	1,50,609	3,73,080	50,005

The rates of the still-head duty are shewn in the following table :—

Talukas for which liquor was issued.	Rate per gallon.		
	15 U. P.	25 U. P.	60 U. P.
BARODA DISTRICT (1902-03 AND 1903-04).			
Petlad, Baroda, Padra, Choranda and the Southern portion of Sinor.	...	2-4	1-4
Saoli, Vaghodia, Dabhoi, Sankheda, Tilakwada and the Northern portion of Sinor.	...	0-12	0-6
Baroda City and the Cantonment.	2-8	2-4	1-4

Talukas for which liquor was issued.	Rate per gallon.		
	15 U. P.	25 U. P.	60 U. P.
NAOSARI DISTRICT (1902-03 AND 1903-04).			
Naosari, Gandevis, Palsana, Kamrej, and the Western portion of the Talukas of Mahua and Vlachha and the British village of Mota.	...	2-0	0-15
Eastern portion of the Talu- kas of Mahua and Vela- chha.	...	1-8	0-11
Vyara and Songad ... ..	...	0-12	0-6
KADI DISTRICT (1903-04).			
All Talukas	1-8	1-0	0-8

In the Baroda and Naosari Districts, the right of selling toddy is farmed out by auction to one farmer for each District, and the toddy farms are sold along with liquor farms. The farmer is given possession of all palm trees belonging to the State ; the Government then levies a tax on every private and State tree that is tapped, and the total proceeds of this tree-tax is credited to the farmer's account. Private owners are also allowed to sell toddy in temporary huts under the trees, and the fees for such licenses are also credited to the farmers' account. The entire arrangement is somewhat primitive, as the State first lets the farm of the entire toddy revenue by auction, and then proceeds to collect much of the revenue on

behalf of the farmer. Some changes in the system were in contemplation after the close of the period under review. In the Kadi and Amreli Districts, there are no palm trees as a rule, and the people are not accustomed to use toddy as beverage. The following table will show the income from the toddy farm in Baroda and Naosari Districts, during the two years under report :—

District.	1902-03.	1903-04.
	Rs.	Rs.
Baroda	1,730	1,057
Naosari	91,920	91,920

The rates of fees for licenses for opening shops and hotels, selling foreign liquors, were as follows, during the years 1902-03 and 1903-04 :—

District.	Fee for a Shop.	Fee for a Hotel.	Remarks.
	Rs.	Rs.	
Baroda ...	100	125	
Kadi ...	75	...	
Naosari ...	100	125	Except in Vyara and Billimora, where the fee for a shop is Rs. 75.

The following comparative statement shows the number of shops and hotels and the amount of revenue derived therefrom in the two years under review :—

District.	1902-03.		1903-04.	
	No. of shops and hotels.	License fees.	No. of shops and hotels.	License fees.
		Rs.		Rs.
Baroda ...	5	550	4	425
Kadi... ..	2	150	2	150
Naosari ...	8	750	8	750
Total ...	15	1,450	14	1,325

The following table gives the total Abkari demands and collections of the years under review :—

District.	DEMAND.		COLLECTION.	
	1902-03.	1903-04.	1902-03.	1903-04.
	Rs.	Rs.	Rs.	Rs.
Baroda ...	1,32,762	1,60,049	1,32,624	1,59,355
Kadi... ..	37,896	51,466	21,764	42,822
Naosari ...	4,70,618	4,67,609	4,70,102	4,66,587
Amreli ...	4,916	4,938	4,872	4,899
Total ...	6,45,692	6,84,062	6,29,362	6,73,463

The following statement gives the number of shops of liquor and toddy opened during the years under review :-

District.	1902-03.				1903-04.			
	Liquor shops.	Liquor and toddy.	Toddy shops.	Total.	Liquor shops.	Liquor and toddy.	Toddy shops.	Total.
Baroda ...	225	11	...	236	256	10	...	266
Naosari ...	137	194	32	363	125	195	30	350
Kadi ...	...	...	...	...	223	...	...	223
Total ...	362	205	33	599	604	205	30	839

The following table gives the comparative statement of expenditure incurred during the years under report :—

Division.		1902-03.	1903-04.	Increase.	Decrease.
		Rs.	Rs.	Rs.	Rs.
Baroda ...	...	8,693	9,180	487	.....
Naosari ...	...	11,939	11,194	.....	745
Kadi ...	...	2,807	5,541	2,734	.....
Total ...	...	23,639	25,915	3,221	745

There is no expenditure separately incurred in the Amreli District on account of the Abkari Department.

227 persons were convicted in 1902-03, and 165 only in 1903-04, for offences under the Abkari Law.

(f)—OPIMUM.

The sources of Revenue from Opium are these :—

- (a) Profits on the sale of Opium in the Bombay market for exportation to China.
- (b) Profits on opium issued to the opium farmers and licensed vendors for consumption in the State.
- (c) Fees for licenses for retail vend and miscellaneous receipts.

The manufacture of opium is a State monopoly conducted under a system similar to the Bengal system, while the retail sale for consumption within the State is managed under the system in vogue in the Bombay Districts.

The cultivation and manufacture of opium were carried on in the Kadi District during the years under report. Opium poppy was cultivated under licenses in the Sidhpore, Kheralu, Visnagar, Vadaoli, Patan, Vijapur and Mehsana Talukas of that District.

The following comparative statement is given to show the area under poppy cultivation and its yield :—

Year.	Area under poppy cultivation in acres.	Total yield of juice in lbs.	Average yield per acre in lbs.
1902-03...	5,576	1,51,948	" 27
1903-04..	18,558	3,71,888	20

The licensed cultivators were bound to sell all the juice they produced to the State at a rate fixed previous to issuing the licenses. The rates for the years under

report were Rs. 3-4-0 per seer of 40 tolas in 1902-03, and Rs. 3 per seer in 1903-04.

The juice of opium brought by cultivators is taken to the opium warehouse at Sidhpore, where it is manufactured into opium. From this warehouse, the opium is sent to Government Depôts in the different districts to be issued to licensed vendors, or is conveyed by rail to Bombay for export to the China market. The following statement shows the quantity of opium sent to the Government Depôts, and to Bombay, in 1902-03 and 1903-04 :—

Year.	Opium sent to Government Depôts for local sale in seers of 40 tolas.	Opium sold at Bombay for export in seers of 40 tolas.
1902-03 ...	16,940	81,571
1903-04 ..	24,290	1,12,124

The system which prevailed during the years under report, for the retail sale of opium by licensed vendors is described below :—

- (1) In Naosari and Amreli Districts the license for retail sale was given to one farmer for the whole district by auction.
- (2) In Kadi District the license was given to a selected man on payment of a lump sum.
- (3) In Baroda District licenses were given for individual shops by auction.

The rate of the issue of opium from the Government Depôts to the farmers was Rs. 12 per seer of 40 tolas during 1902-03, and was raised to Rs. 13, and subse-

quently Rs. 14, in order to make it even with the rates in the neighbouring British Districts.

The following table gives an account of the financial results of the retail sale of opium within the State :—

Year.	Cost of production.	Realised from Licensed Vendors.	Profit to State.
	Rs.	Rs.	Rs.
1902-03	86,085	2,90,053	2,04,017
1903-04	90,135	3,22,959	2,32,823

Six hundred chests were sent to Bombay and sold through Messrs. David Sassoon and Co. in 1902-03 and 825 in 1903-04. The following table will show the financial results of the sale at Bombay :—

Year.	Cost price including interest, Railway freight, agency, etc.	Transit duty paid at Ahmedabad.	Total cost at Bombay.	Sale proceeds.	Profit to State.
	Rs.	Rs.	Rs.	Rs.	Rs.
1902-03	3,77,639	3,00,000	6,77,639	7,35,071	57,431
1903-04	4,97,900	4,32,200	9,30,100	11,59,836	2,29,735

Thirty-five persons were convicted in 1902-03, and only 18 in 1903-04, for offences against the Opium Law.

As the operations connected with Opium are extensive in the Kadi District, they are placed in charge of a

special Opium Superintendent. Mr. Mahomed Ali, an Oxford graduate, and an active young officer, has lately been appointed to this post, and supervises the manufacture and sale of opium. In the other three Districts, the Opium transactions are under the direct control of the District Officer, who indents upon the Kadi Superintendent for the quantity required for local consumption, and supplies it to the licensed retail vendors.

(g)—REGISTRATION.

A new Registration Act came into force at the commencement of 1902-03. The important changes effected by the new law were :—

(1) All documents relating to immoveable property were compulsorily liable to registration.

2. No document was admitted for registration after six months from the date of execution.

(3) Civil Courts were prohibited from admitting as evidence unregistered documents, the registration which was compulsory.

These provisions necessarily brought in a very large mass of documents for registration during 1902-03 as compared with 1903-04, as the following figures will show:—

Year.	Documents Registered.	Income from Registrat on.	Expenditure.
		Rs.	
1902-03 ...	72,779	2,02,260	47,310
1903-04 ...	25,249	79,899	39,886

The large majority of documents registered relate to immoveable property, as the registration of such documents is compulsory under the present law. Thus out of 72,779 documents of 1902-03, 71,767 relate to immoveable property. And in 1903-04, out of 25,249 documents no less than 23,974 relate to such property.

To go into some further detail, the largest number of documents registered were deeds of sale or mortgage of values under a thousand rupees. The following figures relating to these classes of documents are interesting. They throw some light on the commonest transactions among the people as reflected in our Registration offices :—

Year.	Number of Documents Registered.					
	Of value under Rs. 50.		Of value between Rs. 50 and Rs 100.		Of value between Rs. 100 and Rs 1,000.	
	Sale.	Mortgage.	Sale.	Mortgage.	Sale.	Mortgage.
1902-03	2,091	7,936	1,856	17,249	2,893	31,629
1903-04	1,044	2,361	923	4,436	2,349	10,450

There were 44 Registration offices in the State at the commencement of 1903-04, eight of which were filled by *ex-officio* Registrars, and the remaining 36 by men who in Bengal would be called Rural Sub-Registrars. Generally there is a Sub-Registrar in each Taluka. These Sub-Registrars are remunerated from the fees up to a maximum limit fixed for each office.

Mr. Manirai Trikamrai was the Senior Inspector in 1903-04, and Mr. Mangesh Kamalji Nandkarni was the Junior Inspector. Their duties are mainly inspection and supervision, and were satisfactorily performed.

(h)—STAMPS.

The Stamp Office is necessarily under a dual control and supervision. The Accountant General, as the Chief Financial Officer, is in charge of the issue of stamps and of accounts. The Sar-Subah, as the Chief Revenue Officer, supervises the arrangements for the sale of stamps, and generally the working of the Stamp Act.

The two Inspectors of Registration are also entrusted with the duty of inspecting Stamp Depôts as well as public offices which admit documents. Breaches of the Stamp Act are reported by them.

The revenue derived from the sale of stamps during the years under review is shown in the following table :—

Year.	Court Fees.	Non-Judicial.	Total including Miscellaneous Receipts.
	Rs.	Rs.	Rs.
1902-03 "..."	3,44,996	1,70,187	5,48,024
1903-04 "..."	3,00,132	1,15,633	4,41,473

The decrease in the Stamp revenue in 1903-04 is due to the reason which has already been referred to under the head Registration. When the new Registration Act came into operation, at the commencement of

1902-03, making the registration of new classes of documents compulsory, there was naturally a large and sudden increase in the sale both of Court Fees and of Non-Judicial stamps. This swelled the income both in the Registration and in the Stamp Departments, and the year 1903-04 therefore shows a comparative decrease.

The expenditure under head Stamps is shown in the following statement :—

Year.			Expenditure in rupees.
			Rs.
1902-03	...	...	19,653
1903-04	...	...	23,563

(i)—AGRICULTURE.

Bajri (millet) is consumed by all classes of people in the State. It is sown in June or July, requires the monsoon rain, and is reaped in October. Sometimes it is sown with pulses, and as these require a longer time to ripen, they remain in the field after the Bajri has been reaped. The refuse of the Bajri stalk is used as fodder for cattle.

Jowar (Indian millet) is the food of the common people. It is sown in October and reaped in January or February. Like Bajri the grain is ground and turned into bread, but sometimes it is parched or roasted. Cultivators and their wives and children, sitting in their fields day and night to protect the crops, often take a

supply of parched Jowar with them. The stalk is used as fodder.

Wheat is consumed by the rich only, and is quite a luxury for the poor. It is sown in October and November, and reaped in March. Fields for wheat are prepared and irrigated with great care, specially in Kadi District where wells are numerous.

Rice is sown in black soil in the month of June and is generally reaped in September or October. It is a staple produce only in some Talukas, and depends largely on the monsoon rains.

Cotton is grown largely in Naosari and Baroda Districts, and specially in the Talukas of Naosari, Palsana, Padra, Choranda, Dabhoi, Sinor and Baroda. It is often sown with rice, and after the rice has been reaped it grows rapidly. It flowers in October and is gathered in February or March. When full grown its height is three or four feet. It is a valuable crop for the cultivators, and is extending into Kadi and other Districts. The Naosari Cotton is considered the best in India.

Tobacco is a valuable crop, which grows mainly in Petlad Taluka in Baroda District, the soil of which is specially suited to the plant. The seed is sown in June, and the fields are then covered to protect them from the sun and excessive rain. The seedlings take about two months to grow to a height of about $4\frac{1}{2}$ inches. In the meantime other fields have been prepared, and the seedlings are then taken away from the nursery, to be transplanted in rows, in the places prepared for them. When the crop has grown to a height of a foot and a half, it begins to flower, and the cutting of the crop begins when the leaves turn yellow. The skill of the Petlad tobacco

grower was greatly appreciated by Dr. Vœlcker when he visited India fifteen years ago. But the process of curing and dressing the leaf is perhaps susceptible of improvement.

Sugarcane is a valuable crop and requires good soil, much care, and a great deal of water. It is out in the month of November or December, and the juice is turned into molasses, while the stalks are used as fuel or fodder for cattle.

Pulses.—Chana and Mug and Adhar and other pulses are grown in the winter. They are generally sown with some other kind of grain, and reaped after that grain has been harvested.

Opium.—It is a Government monopoly, and is therefore grown in limited areas with the sanction of the Government. The fields are prepared and irrigated, and the young poppy is tended with great care. In April and May the juice is expressed and is sold to the Government at fixed rates.

Other Crops.—Maize is cultivated in many places. The Castor oil plant grows everywhere. Various other crops are grown which do not require any detailed mention.

Manure.—The great want from which agriculture suffers is that of manure and irrigation water, as has been pointed out by Dr. Vœlcker in his excellent work on Indian Agriculture. Manure in Baroda is prepared in various ways. The cowdung is allowed to accumulate in pits during the cold season, and is taken out and spread in the fields a month or two before the rains commence, and the fields are then ploughed and clod-crushed. Flocks of sheep and goats, belonging to itinerant shep-

herds, are allowed to hgt in the fields, and their droppings are collected and spread over the soil, which is then ploughed and clod-crushed. Ashes of fuel and decayed leaves, mixed with black muddy earth, are also used as manure. The mud of tanks or river bed, containing a large quantity of decayed vegetable matter, is considered excellent manure. Oil refuse, after the oil has been pressed, is invaluable as manure ; but oil seeds are largely exported, and thus the manure is lost to the country. Attempts to prepare and use bone-dust manure have not succeeded very largely.

Irrigation from wells.—Cultivators in this State irrigate their fields very extensively from wells sunk in their fields by themselves, often with the aid of advances from the Government. The number of useful wells and tanks during the two years under report is given below :—

Particulars.	1902-03.		1903 04.	
	Wells,	Tanks,	Wells.	Tanks,
For Irrigation ...	58,844	1,234	58,763	1,111
For other purposes.	12,690	5,292	12,600	5,318
Total ...	71,534	6,527	71,363	6,429

The slight decrease in the number of wells and tanks in the last year, as compared with the preceding year, is owing to the fact that some tanks have silted up, and

some wells have become brackish on account of the insufficient rainfall of recent years. It may be noted, that the number of wells which have become brackish is still larger in the current year. The fresh water in wells is all from surface percolation ; and when that percolation decreases or stops on account of want of rains, the water often turns brackish on account of saline layers below. This is one of the many hardships from which cultivators suffer in years of drought.

Irrigation rates.—Special rates are charged for the use of these wells for irrigation, and these are added to the land assessment. There are different methods for realizing these rates which will be fully described in the Section on Settlements. It is enough to state here that these different methods seem to have been suggested by the variety of the soil in the different districts. In Kadi District, for instance, the sinking of a well is easy and inexpensive, every cultivator, generally speaking, may have a well in his field if he likes, and an irrigation tax on all lands, where water is available within a reasonable depth, which is the system in British Districts, seems to be a suitable system. On the other hand, the sinking of a well often costs a thousand or fifteen hundred rupees in Baroda and Amreli Districts, and to levy irrigation rates on all lands, where water is available within a certain depth, would be to tax cultivators for a possible advantage which they, however, cannot afford to enjoy. Lastly in Naosari District there are subsoil channels of water along the beds of dried up rivers, and the District Officer, Mr. Khaserao Jadav, reports, after careful and ingenious enquiries, that wells along these channels are more successful than

elsewhere, and that water rates should not be imposed before the course of these unknown channels has been ascertained. The subject is thus one of great complexity. The question, whether the levy of rates on all lands where water is available within a certain depth, as is the practice in British Districts, is feasible, and whether it is expedient to impose any appreciable tax at all on improvements made by the cultivators themselves, is under careful consideration in the current year.

Tenant rights.—No Tenancy Act has been passed in this State. But immemorial custom takes the place of law in India, and ancient custom sanctions the tenants' right to sell, mortgage and inherit the ancestral field. No ruler in past times could successfully abolish this practice even if he desired to do so ; and the number of sale and mortgage deeds annually registered in Baroda State indicates the universal practice which prevails at present. The only restriction which His Highness's Government has thought fit to impose on these rights is one in the interests of cultivators. It has been enacted that when a money-lender seeks to execute his decree, and obtain possession of a cultivator's holding, a portion of the holding, sufficient for the maintenance of the cultivator and his family, shall be exempt from sale in execution of such decree. This provision is found to be a sufficient protection ; and the Maharaja has not thought it just or expedient to impose any other restrictions on the rights enjoyed by the cultivators generally.

Protection of ignorant races.—In the case of one class of cultivators, however, a further protection has been considered necessary. Bhils and other wild tribes, known by the general name of Kaliparaj in this State,

are ignorant, improvident, and often nomadic in their habits ; and rules have been framed to prevent them from being swept away altogether from their landed possessions by the more intelligent Aryan cultivators. When the settlement of Songad Taluka was sanctioned by the Maharaja in 1903, His Highness also sanctioned some rules for the protection of the Kaliparaj people. Transfer of their land by sale or mortgage is restricted by a provision that a sufficient quantity of land should be left for their own maintenance. This necessary protection was extended by His Highness to the Kaliparaj people of Vyara Taluka in August 1904.

Another provision is made for their protection in respect of instalments of revenue. The general rule is, that the annual revenue is payable in two or three instalments between January and April, when the crops are harvested ; but an exception was made by Diwan Bahadur V. M. Samarth, and sanctioned by His Highness the Maharaja, in April 1904, in the case of particular villages or tribes. The District Officer was empowered to fix for their convenience a larger number of instalments not exceeding twelve, and not falling within one month of each other. This provision came into operation in September 1904.

Agricultural Provident Fund.—A more striking endeavour has been made for teaching self-reliance and self-help to all classes of cultivators in times of distress and famine. In the famine year of 1899-1900 the people of Damnagar Taluka in Amreli District applied that a Famine Provident Fund should be created from voluntary subscriptions made by the people themselves, and they asked that His Highness the Gaekwar's Government

should receive the subscriptions in the Government treasuries, and be the custodian of the fund. It was prayed that documents relating to this fund should be exempt from stamps and registration fees, that the money subscribed should be exempt from attachment in execution of Civil Court and Revenue Court decrees, and that the contributions should not lapse to Government on the death of the contributor without heirs, but should be added to the general fund. Diwan Bahadur Samarth, then District Officer of Amreli, took up the matter zealously, and prepared a comprehensive scheme which after much deliberation was sanctioned by His Highness the Maharaja in January 1904.

The details of the scheme are these. Persons above the age of 12 may contribute one anna per head monthly. Persons between 3 and 12 years may contribute half an anna per head. When the contributions amount to Rs. 20 with regard to any single person, his contributions shall cease. On the death of a contributor the total amount of his contribution shall be credited to his direct heirs, but a fourth of the sum contributed may be paid out, if demanded, for the performance of funeral ceremonies. The sums contributed should not be drawn upon within 20 years, unless a famine occurs within that period, and two-thirds of the villagers and three-fourths of the Panchayet decide to draw upon the fund. The subscriptions should be collected by Panchayets on whom is imposed the duty of keeping accounts.

This excellent scheme was sanctioned in January 1904 ; but, unfortunately, the famine of the current year interferes with its immediate success. But as the scheme originated in the wishes of the people, and its

carrying out has been largely entrusted to the leaders of the people, there is every reason to hope for eventual success.

Agricultural Banks.—There are two Agricultural Banks, one at Songad in the Naosari District with a branch at Vyara, and the other at Harij in the Kadi District. These banks were opened in 1899-1900 and 1900-01 respectively, to help the backward populations of these Talukas, and though joint stock in name, are practically financed and managed by the State. The banks make advances in cash and kind for all purposes to *bona fide* cultivators. Recoveries are made by the staff, but in cases of obstructiveness on the part of the borrowers the Revenue Department is authorised to help recoveries, thus avoiding a recourse to civil courts. The dividend on the shares subscribed by the State is restricted to a maximum of 3 per cent., and on private shares to 6 per cent., the excess of profits going to reserve and bonus.

The following table gives at one view the business done by the Banks :—

Number.	Item.	Songad Bank.		Harij Bank.		REMARKS.
		1902-03	1903-04	1902-03	1903-04	
	Nominal Capital ..	Rs. 25,000	Rs. 25,000	Rs. 50,000	Rs. 50,000	
	Paid up Capital—					
1	State ..	12,500	12,500	12,500	12,500	
2	Private ..	380	380	200	200	
3	Reserve fund ..	4,997	5,107	348	985	
4	Bad debts fund ..	2,408	2,408	....	....
5	Bonus fund ..	392	447	38	108	
6	Deposits during the year.	2,372	2,034	....	....
7	Deposits at the end of the year.	12,521	5,378	....	....
8	Advances for seed, food, &c., in kind.	1,667	868	1,800	581	
9	Bullocks	286	1,376	2,418		

Number.	Item.	Songad Bank.		Harli Bank.		REMARKS.
		1902-03	1903-04	1902-03	1903-04	
		Rs.	Rs.	Rs.	Rs.	
10	Agricultural work cash.	6,388	7,154	1,230	1,942	
11	Paying Sowkar's debts.	410	634	..	1,293	
12	Marriages	2,743	686	60	565	
13	Revenue and rent..	..	2,892	2,524	909	
14	Funeral expenses ..	49	..	..	124	
15	Total advances ..	11,525	13,561	7,243	7,444	
16	Total outstandings	38,348	38,481	16,042	19,471	
17	Amount due.. ..	17,219	18,555	13,523	10,285	
18	Recovery—					
	By Bank's staff ..	14,033	15,439	5,189	7,726	
	Do. with State help.	585	417	..	..
19	Percentage of recovery.	84.8	85.4	41.8	75.1	
20	Net profit	613	563	380	674	

Agricultural Education.—There are two agricultural schools, one at Baroda, attached to the Model Farm, and the other at Songad.

The Baroda school of Agriculture has a two years' course, and teaches Agriculture, Botany, Geology, Chemistry, Veterinary and Revenue rules, and Accounts, in addition to practical work on the Farm.

Baroda Farm.—The Baroda farm was first started in connection with the agricultural classes in the college, and when these classes were abolished for want of students, a vernacular class in agriculture from the School of Arts was transferred to the Farm. This Farm is worked with three objects—

1. Instruction to students.
2. Experiment.
3. Production of good seed for distribution and sale.

The ordinary Gujarat crops are grown for seed purposes, and small plots of all other crops suitable to Gujarat

soils are maintained for instruction. From the reports of experiments, in India and outside, results suitable for Gujarat are retested on the Farm with a view to their introduction, if successful. During the years under report, Kajli sugarcane from Burdwan, Japanese ground-nut, Muzafarnagar wheat, German sugar beet, and Egyptian cotton and ramie, were the principal crops grown for experiment. Of these, the Japanese ground-nut has proved successful, and efforts will now be made to introduce it in the Baroda District as a Kharif crop, and in the Kadi District as an irrigated crop. The experiment in sugar beet will be stopped as it does not seed successfully, and it will not do to introduce a crop for which seed would have to be annually imported. The results of other experiments are not conclusive, and will require further trial.

There is a dairy, with Gir cattle, attached to the Farm. It was first started with a view to introduce the European system of butter making, to impart instruction to students in dairy work, and to produce a small agricultural bullock for Gujarat. The efforts have been so far successful that almost every large village has a cream separator, and cream and butter are exported to Bombay in large quantities. The bullocks produced from the Gir herd have proved too weak for work in Gujarat. The herd will therefore now be gradually reduced, only a small number being kept for instruction to students. The skim-milk after the removal of cream was absolutely wasted. We have succeeded in turning it into a powder, but the method is not yet perfected.

Songad School.—The *Uphanka* schools for boys and girls at Songad are peculiar institutions opened with a view to train the most backward class of the population, namely the Kaliparaj, into good agriculturists. The boys and girls live in boarding houses, and are clothed and fed at State expense. They are given the usual primary instruction in Gujarati, and go through a graduated course of agriculture, all the work on the farm being practically done by them according to their age and physical condition. With a view to introducing sericulture as a cottage industry, a plantation is being prepared, and practical sericulture will form a part of the curriculum. The boys' school was opened in 1890, and the results so far are very encouraging. A good many Gujarati crops have been introduced in the district, and there is a general improvement, though slow, in the agricultural practice. The Farm attached to the School was 50 bighas in extent, and a fresh plot of 35 bighas was added during 1903-04 for the sericulture section. The income of the Farm was Rupees 1,807 in 1902-03, and Rupees 1,509 in 1903-04, as against an expenditure of Rupees 1,128 and 1,214 respectively. This is probably the only Government Farm in India that works at a profit.

Entomology.—For the study of insect pests of crops Mr. Chhotabhai Umedbhai was sent to Surat to be trained under Mr. H. Maxwell Zefroy, the Entomologist to the Government of India. Mr. Zefroy reports that the learner has made very good progress, and will be fit to take up independent work on his return to Baroda.

Seed Depôts.—To supply good seeds and manures on easy terms, Seed Depôts were started by the department

in 1895. Four such dépôts were working during the years under report at—

1. Padra in the Baroda District,
- 2-3. Kalol and Kheralu in the Kadi District,
4. Kodinar in the Amreli District.

In addition to supplying seeds locally collected, these dépôts indent the best seed of local crops from outside through the Director, and act as agencies for the introduction of improved or new varieties of crops.

On account of heavy arrears due to the famine and bad years, the State advance of Rupees 25,000 to these shops was locked up, and very little business was possible during the years under report. The total advances during the two years were Rupees 5,263, and 4,649, and the recoveries amounted to Rupees 17,009 and 8,541 respectively. The net loss in working was Rupees 920 in 1902-03, and Rupees 829 in 1903-04.

Arboriculture.—The work of planting Babul trees in the waste lands of the Baroda district was retransferred to this department during 1902-03. Of waste lands, 40,195 bighas had previously been given to the people for raising Babuls on the share system, but the work was not properly done in most cases. An enquiry was taken in hand and by the end of 1903-04, 10,648 bighas were resumed, and 29,547 bighas allowed to remain under the contractors. Enquiry into the remaining cases is proceeding. Towards the close of 1903-04, the work in the Kadi District was ordered to be taken in hand, and seed was broadcasted in the waste lands of 24 villages of the Dehegam Taluka. The expenditure on Babul planting was Rupees 625 in 1902-03, and Rupees 944 in 1903-04, and the income was Rupees 1,309 and Rupees 3,509

respectively. On the sandy beds along the Kodinar coast fresh water is available at a very small depth, and the place is fit for cocoanut plantation. A small trial plantation was undertaken in 1896 with a view to the introduction of cocoanut palm in the district. At the end of the period under report there were 650 trees, of which 200 are expected to bear fruit after two years. The special establishment is now abolished, and the plantation is maintained under the supervision of the Kodinar Seed Depôt Clerk. In some villages the people have raised small plantations, and they are doing well.

Veterinary and Cattle breeding.—There are two Veterinary Surgeons under the department, one at Baroda and the other at Mehesana in the Kadi District. These Surgeons travel about during the fair season, and treat the cases that come to their notice, and remain at head-quarters during the monsoons. As many cattle die of rinderpest, both the Veterinary Surgeons were sent in November 1903 to Bareilly for a special course of rinderpest inoculation under the Imperial Bacteriologist, and they returned with certificates of proficiency. The following table gives the number of cases treated and the deaths that occurred at the two dispensaries : —

No.	Year.	Number of Cases			Remarks.
		Treated.	Cured.	Died.	
1	1902-03	2,366	2,230	136	
2	1903-04	1,750	1,731	19	

Out of all the cases treated, there were 61 cases of operation, of which 50 were successful.

Four stallion Gir buffalo bulls were maintained during the period under report, 2 at Baroda, 1 at Naosari and 1 at Gandevi. They served 834 buffaloes."

Area under Crops.—The following table gives the area under the principal crops during the period under report :—

Number.	Name of crop.	1902-03.		1903-04.	
		Area in Bighas. 1 $\frac{1}{4}$ Bigha = 1 Acre.	Percentage of total cropping.	Area in Bighas. 1 $\frac{1}{4}$ Bigha = 1 Acre.	Percentage of total cropping.
1	Rice ...	2,25,506	5.48	2,96,350	6.10
2	Bajari ...	11,50,777	27.95	10,28,536	21.27
3	Jowar ...	8,53,024	20.72	9,97,610	20.63
4	Wheat ...	1,62,119	3.93	1,49,512	3.09
5	Other serials...	2,58,359	6.27	3,28,182	6.78
6	Pulses ...	3,33,918	8.11	4,71,799	9.69
7	Cotton ...	6,55,591	15.92	8,41,768	17.41
8	Tobacco ...	35,200	.85	33,730	.69
9	Opium ...	8,027	.19	29,405	.06
10	Sugarcane ...	4,884	.12	2,137	.04
11	Rapeseed ...	44,718	.16	54,549	1.13
12	Other oil-seeds	3,06,766	7.45	4,97,915	10.29
13	Garden crops.	29,064	.70	30,729	.63
14	Others ...	62,778	1.52	72,002	1.49
	Total ...	41,16,741		48,34,224	

Director of Agriculture.—Mr. Raojibhai B. Patel, M.R.A.C., of whom some mention has been made under the head of Customs, was the Director of Agriculture and of Industries during the period under review, and initiated many of the measures described above.

(j)—INDUSTRIES AND TRADES.

Weaving.—The weaving industry of Naosari District is of ancient repute. Fine *Dhoti*, *Sari*, *Basta* and *Bafta*, made at Naosari and Gandevi, were in great demand at the Portuguese, Dutch, and English factories in Surat, in the seventeenth and eighteenth centuries, for export to Europe; and in 1788 Dr. Hove, a European traveller, visited Gandevi to learn the art from Parsee weavers. The industry practically died out early in the nineteenth century, but Parsee women still manufacture quantities of *Kasti* worn by men and women, and are skilful in making ornamental borders of *Saris*.

In Baroda District, there is a considerable weaving industry still at Dabhoi, where fine turbans are prepared. And cloth, superior to the common coarse cloth of the lower classes, is produced at Petlad and Vaso and some other places.

In Kadi District, Patan the old capital of Gujrat, (from the 8th to the 14th century) was famous for its weaving industry. A great part of the trade was transplanted to Ahmedabad when that place was chosen as the capital, but the decayed weaving community of Patan still turn out a superior quality of cloth which has a fair sale. Silks, however, are the speciality of Patan, and the silk *Potala* of this town is largely in demand in all parts of Gujrat, and forms the bridal

trousseau of high caste Hindu women all over the Province. The rise of Ahmedabad diverted a part of the the silk as well as the cotton weaving from Patan ; but in the 18th century heavy duties were imposed on the Ahmedabad weavers by the Peshwa and the Gaekwar, and weavers in large numbers returned to their old home at Patan. In 1818, Ahmedabad became British, cesses on manufacture were abolished, and the export duty of 15 per cent. was reduced to $2\frac{1}{2}$ per cent. The weavers of Patan, therefore, once more migrated to Ahmedabad, and Patan has never flourished since. The history of the weaving trade of Patan and Ahmedabad is a lesson which fiscal reformers and administrators should remember in Baroda.

Embroidery.—Some embroidery with gold and silver and silk thread is done in Baroda, and the work, both in pattern and execution, is of a superior description. But the industry, which is largely carried on by women, is not considerable.

Dyeing.—In Padra, Sankheda, Petlad, Dabhoi and other places in the Baroda District, dyeing and calico printing are old industries, and the colors employed are generally red, indigo and black. In the Kadi District, there is a large community of dyers at Visnagar which is a flourishing town.

Metal work.—Dabhoi and Petlad in the Baroda District, and Kadi, Visnagar and Patan in the Kadi District, are known for their brass and copper ware. European copper and brass sheets are used in the manufacture, and the articles made are those in ordinary use among the people. Gold and silver ornaments of a superior description are prepared at Baroda, Patan and

Amreli. Excellent silver articles known for their fine polish are made in the last named place.

Pottery.—This, of course, is an extensive industry in a country where the mass of the people use earthenware for storing drinking water and other purposes. Patan is known for its ornamental pottery.

Carpentry.—This too is an extensive industry, but wood engraving of a superior quality is done at Baroda, Patan, Kadi, Visnagar, Vadnagar, and Naosari. Articles prepared in these places of sandalwood and mahogany and other kinds of wood have a sale in Europe.

Sculpture.—The industry has almost died out, though specimens of fine Hindu sculpture, dating from the time when Patan was the capital of Gujrat, are to be met with everywhere. The sculptured gates of Dabhoi and the equally fine remains of temples and structures at Sidhpur and Patan, are among the best specimens of the Hindu sculpture of the twelfth and thirteenth centuries. Stone masons of this State have still a good repute, and have not quite lost their ancestral skill.

Dyeing Factory.—Mention should now be made of industries carried on under modern methods, and the dyeing factory of Petlad deserves an honorable place. It was established by Parakh Narainlal Keshavlal some ten years ago, and he suffered some losses in the beginning. But he persevered, and made the concern profitable in the end, and the factory turns out about 15,000 lbs. of dyed yarn every day. The yarn is in demand in many parts of India and outside India.

Ginning Factories.—There were 44 ginning factories and presses in different parts of the State, 24 of them being in the Baroda District, 12 in Amreli and 8 in Naosari.

Chocolate and Rice Factories.—The rice factory at Billimora ought to be successful as Billimora commands a good market for rice. A chocolate factory has just been started at Billimora by Mr. Godbole, who learned industries in England and Germany, and the requisite machinery has been imported from Europe. The concern is managed by a limited Company, and the Baroda Government has taken 70 shares of Rs. 100 each to encourage the promoters.

Rectified Spirit Factory.—There is one at Naosari, the promoter being Mr. Bana. It is proposed to start another at Baroda.

Match Factory.—Mr. Gokhale has started a match factory at Vyara which is still in its infancy, but promises to be a success. Mr. Khaserao Jadhav, District Officer of Naosari, is also something of an inventor, and has produced matches from very cheap materials; but the business has not yet been placed on a commercial footing.

State Cotton Mill.—In 1883-84 His Highness the Maharaja established a Cotton Spinning and Weaving Mill at Baroda at a capital expenditure of Rs. 6,35,000, with a view to encourage local manufacture and to foster private enterprise. State undertakings of this kind are seldom financially successful; but the Maharaja's object was more to educate his people than to create a source of gain to the State. The Mill has worked these 21 years and has paid a poor interest on the capital at about 2 or 3 per cent. His Highness has reasons to believe that the transfer of the concern to private hands would be an encouragement to private enterprise, and that one Mill successfully worked by private owners would lead other capitalists to follow the example.

Accordingly, His Highness has sanctioned the sale of the Mill on its present capital value, and the negotiations are almost complete.

State Sugar Factory.—A factory for manufacturing sugar was started at Gandevi, some twenty years ago, by a Joint Stock Company, the State taking half the shares. The Company failed to make it a success, and the concern was bought up by the State. But it succeeded no better under State management, and the working of the factory was closed in 1894. A proposal to transfer the concern to private owners is under the consideration of the Maharaja.

State Sericulture.—Endeavours have been made to start silk industry in this State. We have about 5,000 mulberry trees in the Songad nursery, and these will shortly be planted out and will be fit for rearing worms a few years hence. We have also a few acres of land under bush mulberry, and the rearing of worms will commence in the current year 1904-1905. Boys and girls belonging to the lowest classes are receiving instruction in the business, and will be ready for work before long.

One teacher from Songad School, and one clerk from the Revenue Office, will shortly be sent to Mysore to receive lessons in practical sericulture. In the meantime steps have been taken to extend the cultivation of bush mulberry, and to commence the work on a larger scale than has been done hitherto, under expert advice.

Improved Hand Loom.—Some note should be taken of an improvement effected by some ingenious manufacturers of Petlad in the preparation of warps. The improved apparatus invented by them produces 40 or 50 warps at a time, and thus causes a great saving of time

and expense. The improved hand loom invented by Mr. Churchill of Ahmednagar has also come to the notice of the State, and arrangements have been made to train a number of weavers to work the loom. It is proposed to construct looms of this kind in large numbers, to hire them out at nominal prices to weavers who are willing to work them, and thus to foster manual weaving under this improved method. Weaving by hand looms has been the national industry of India since ancient times, and if the improved hand loom can hold its own against the power loom of Europe, the great question of reviving a very extensive industry will have been solved.

General Condition of Trades and Industries.—On the whole it must be admitted that our record of trades and industries in Baroda is a poor one. The old industries are mostly on the decline; industries under new methods have not yet achieved a notable success; and State enterprises have been, commercially, failures. New cotton mills have not sprung up at Baroda as they have at Ahmedabad; and trades and manufactures are not brisk here as at Broach or Surat. It is easy to attribute this to the backwardness of the people, their lack of enterprise, their want of adaptability to new conditions. But such explanations are less than half true, and only conceal from our eyes the real causes of failure which we should seek out and remove. The people of India are quick to adopt new methods in industries as in agriculture, when they have the assurance of profit and success; and capital and commercial credit are attracted by favourable conditions in India as everywhere else. It may be that in Baroda, peace, order, and good government have been established later

than in British Gujrat, and commercial enterprise is, therefore, somewhat belated. Whatever may be the reason, let us fully realize and candidly acknowledge that it will be our own fault as administrators, if we fail to bring about those favourable conditions under which trade and manufacture prosper, to remove that feeling of uncertainty handed down from the past which deadens enterprise, and by liberal fiscal measures and a wise continuity of policy to create that feeling of security under which the people are always prompt to work out their own salvation. A wise administration will give them all the help and instruction that is needed, and will remove all hurtful and needless restrictions; and there is every hope that Baroda will in the near future take its legitimate place as a centre of the manufacturing industries of Western India.

(k)—FOREST.

The Forest Department was created in January 1877. Mr. Gustadji Mediwalla was appointed head of the Department in 1894.

The forests in charge of the Department are situated in Naosari, Baroda, and Amreli Districts, not in Kadi District. There are 5 ranges in Naosari, one in Baroda, and one in Amreli. Each range comprises both reserved and unreserved forests, and the reserved forests in the 7 ranges occupy about 700 square miles. The area of the unreserved forests is unknown.

People are allowed to take fuel for *bona fide* personal use from the reserved forests of Naosari, but not from the reserved forests of Baroda and Amreli. They are allowed to graze their cattle in reserved forests everywhere, on payment of fees, except in closed areas.

In the unreserved forests the Forest Department only deals with trees of 24 species, and sells them when necessary. The Department has nothing to do with smaller trees or grass, which are under the control of the Revenue Department. Cultivation was extending in the unreserved forests till the commencement of the recent famines.

Under the Conservator there is one assistant, Mr. Amin. There are two rangers trained at Dehra, and five more rangers who are untrained. The untrained men, who have not passed examinations, are called Darogas. There are 7 Naib Darogas under the 7 rangers and Darogas.

The reserved forests had complete rest for the last 13 years. But since the last year the Department has begun to work these forests. Plans have been laid out for the next 20 years showing in what rotation each forest block is to be cut, what area is to be regenerated, what fire protection works are to be undertaken, and what accommodation is given for grazing. In accordance to these plans wood is being cut in 2 ranges.

The annual demand and collection of the two years under report, together with the expenditure of the Department, is shown in the following tabular statement:—

Year.		Demand.	Collection.	Expenditure.
		Rs.	Rs.	Rs.
1902-03	...	58,583	54,787	52,451
1903-04	...	89,177	88,552	54,607

(1)—STATE BOUNDARIES.

The territories of His Highness the Gaekwar are so scattered and interlaced with British territories, and those of other Native States, that the work of keeping the boundaries fixed is exceptionally heavy and arduous. In 1884, when the Revenue Survey and Settlement of the State had just been undertaken, His Highness made some proposals on this subject which were approved of by the British Government, and instructions were issued to Political Officers to the effect that other Native States should be represented by competent and trustworthy agents for the purpose of the delimitation of boundaries.

Mr. F. A. H. Elliot, C. I. E., then in charge of the Survey and Settlement of certain Talukas, issued orders for the demarcation of their boundaries at the same time. The two descriptions of work, however, could not be satisfactorily performed by the same staff, and a Boundaries Settlement Office was organized in 1891. Ten years after, this office was amalgamated with the Revenue Office, which was doing much the same work, and was thus formed into a branch of the Revenue Department.

Mr. Kothawala was in charge of the Boundaries Office during the two years under review. When boundary cases arise, he conducts cases on behalf of this State before the Boundary Commissioner. His further work consists of inspections of boundaries which requires him to be out during 8 months in the year. During this inspection, he examines the state of the boundary pillars, and takes note of all encroachments made either by foreign subjects, or by the Railway Department.

The magnitude of the work of the office will be understood from the fact that the State has about 3,800 "boundaries," measuring about 3,150 miles. Of these 1,500 "boundaries" are in relation to other Native States, and the rest are in relation to British territory. With regard to the former we should have a map for each ; but, so far, only 400 are ready and 1,100 more have yet to be prepared. Each map has to be prepared after survey and measurement in presence of an agent of this State and an agent of the other State concerned ; it is clear therefore that we have a work of several years before us.

The work done in this office during the two years under report is shown in the following statement :—

Nature of work.	1902-03.	1903-04.
Foreign boundaries examined	211	228
Taluka Boundary records inspected ...	10	24
Boundaries surveyed for verification and settlement.	45	80
Boundaries verified	16	36
Boundaries settled ' ' ...	10	21
Boundaries demarcated by the Boundary Commissioner.	3	9
Boundary cases prepared or conducted before the Boundary Commissioner.	2	3
Mileage of railway surveyed for demarcation or demarcated.	35	64
Copies of boundary maps supplied to other offices.	80	173
Copies of boundary field books supplied to other offices.	125	153

Special mention should be made in this report of the settlement of the Kanied-Barmuwada boundary dispute. Owing to the complicated nature of the case, as well as its special significance, it had dragged its weary length for no less than 75 years. Mr. Kothawala conducted this case before the Boundary Commissioner with great care and industry, and obtained documentary evidence from British Districts which led to its satisfactory conclusion. His services in respect of this case, and generally in the performance of the difficult duties of his office, have come to the favourable notice of His Highness the Maharaja.

It is necessary to add that the Simana Kamdar, Mr. Ganesh Anant Lole, and the Vahivatdar of Dehgaon, Mr. Shival Malukchand, also rendered important help in the conduct of the above case. A good service ribbon was awarded to Mr. Lole in recognition of his services.

(m)—SANITATION.

Dr. Krishnarao Vishvanath Dhurandhar joined the service of this State in 1888, and was made Sanitary Commissioner in 1892. He has virtually organized the Sanitary Department and introduced animal vaccination and meteorological observations. He sent papers to the International Congress of Hygiene and Demography held at London and at Budapesth, and was made, first a Member, and then a Fellow, of the Royal Sanitary Institute of Great Britain. In 1898 he organized the Plague Relief Department in co-operation with British Officers, and the personal distinction of Rao Bahadur was conferred on him by the British Government. From May 1903 to August 1904 he was temporarily trans-

ferred to other work, and the Chief Medical Officer of the State held charge of the Sanitary office in addition to his other duties.

The vaccination work of the Sanitary Commissioner is under the supervision of the Medical Department, and will be spoken of in another section. But his work in connection with meteorological observations, the general health of the people, and the sanitary improvements of towns and villages, is under the supervision of the Revenue Department, and will be dealt with here.

Meteorological Observations.—There is a second class Meteorological station in the Central Jail in Baroda town. The results of the readings taken in this Observatory during the year 1903-04 may be summarized thus:—Barometer average monthly records, lowest in July, 29·488 and highest in November, 29·892. This may be taken to be generally the case every year, the average being lowest at the commencement of the monsoon, and highest at its close. The lowest temperature during the same year was reached on the day following the Christmas, 26th December 1903, when the thermometer fell to 37 degrees, while the highest point was reached on the 2nd May 1904, when it rose to 110. The mean temperature in 1903-04 was 77 degrees, which was 1·7 less than in the preceding year. “The increase in cold,” says Dr. Dhurandhar, “synchronized with the greater number of plague cases and deaths in the city.”

The prevailing winds during most part of the year have a decided westerly component, and this west wind is from the sea. The direction of the wind points to the direction in which the main streets in Baroda and

other towns ought to run. The average daily velocity varied for 101 miles in October to 281 in June, the mean daily velocity for the year 1903-04 being 163 miles.

General Health and Vital Statistics.—Births and deaths during the years under report are shown in the following table :—

Year.	Births.	Deaths.	Births per mille.	Deaths per mille.
1902-03	36,095	61,718	17·4	31·6
1903-04	39,730	64,892	20·3	33·2

One hundred and twelve male births were registered in the entire State against every 100 female births. It is doubtful if such a large difference exists in fact, or is due only to defective registration. The great excess of deaths to births points to defective registration. Deaths create some noise in a village, and are less likely to be left unreported than births ; and hence the figures for deaths are approximately correct, while those for births are not.

More than one-half of the total deaths was due to "fever," a name in which are ignorantly included many diseases, the prominent symptom of which is a rise in the temperature of the skin. The beginning and the end of the cold weather, December 1903 and March 1904, were the worst months for fever in the last year, as they are in most years. The rainy season, June to September, is, curiously enough, the season most free from fevers.

Deaths from cholera were not many—145 in 1902-3, and 151 in 1903-4. Small-pox carried away 601 in the last year as against 124 in the previous year. No

explanation has been given for this increase. The deaths from dysentery and diarrhoea were 1,226 in 1902-03 and 1,050 in 1903-04.

The largest mortality, next after fever, was from plague, the figures for which are given below for the last eight years :—

Year.			Attack.	Deaths.	Remarks.
1896-97	...	...	3,289	2,687	From October 1896 to June 1898.
1897-98	...	...	
1898-99	...	...	4,289	3,086	
1899-1900	...	...	501	365	.
1900-01	...	...	583	350	
1901-02	...	...	4,838	3,308	
1902-03	...	...	14,207	10,196	
1903-04	...	...	19,982	14,949	

These great variations in deaths from plague during the last eight years lead one to the conclusion that plague follows on the heels of famine. The years 1897 and 1898 were famine years, and deaths from plague were high in 1897-98 and 1898-99. Then there was a sudden drop in the figures in years of comparative prosperity. There were famines and scarcity again from the latter end of 1900 to the latter end of 1903, and deaths from plague mounted higher than before in 1901-02, 1902-03, and 1903-04. The harvests of 1903-04 were comparatively good, and plague cases have gone down

in the current year. The same conclusion is forced on us if we compare the deaths District by District as shown in the following table compiled for 1903-4 :—

District.	Deaths from plague.	Plague deaths per mille of population.
Baroda	4,128	6·5
Kadi	5,863	7·0
Naosari... ..	2,103	7·0
Amreli	2,855	16·5

It is well-known that the three-years famine was severer in Amreli District than in the three other Districts ; and the death-rate from plague was higher there than elsewhere.

Sanitary Improvements.—These were suggested after visits to town and villages in course of the tours of the Sanitary Commissioner. The removal of rank vegetation from the vicinity of wells, the assignment of places for washing, the regulating of manure heaps, and the repair of roads, were the subject of these orders. A few simple sanitary instructions for the guidance of all towns, and some others for the guidance of all villages, are under preparation in the current year. As a complete system of local Self-Government is being organized, it will be easy to entrust the village Panchayet, the Taluka Board, the District Board, and the Municipalities, with the observance of these rules in villages and towns.

V.—SETTLEMENTS.

(a)—OLD SYSTEMS AND NEW.

By ancient custom the King is entitled to a share of the produce of the cultivated land. This share was fixed at one-sixth, or one-eighth, or one-twelfth, by the Institutes of Manu, but in practice a larger share was often taken, or at least claimed. Under the strong government of Akbar, his Finance Minister, the famous Todar Mall, introduced a Revenue Survey in Gujarat in 1576. Lands subject to assessment were surveyed and assessed, a third of the estimated produce was demanded as the State Revenue, and payments in cash were substituted for payments in kind. Where a regular survey could not be made, fields were inspected when the crop was ripe for the sickle, and were assessed according to their supposed value.

This *Cash Bighoti* system did not suit the people, and an unvarying money demand could not be realized in years of good harvests and bad harvests, of high prices and low prices. The payment in kind, or the *Bhagbatai* system, therefore lingered in Gujarat, and once more became universal with the decline of the Moghal power, and the establishment of the Maharatta Rule.

It is unnecessary to narrate in this Report the Land Revenue System of the early years of the Maharatta Rule. It will suffice to state that the collection of the State Revenue in specified areas was entrusted to particular agents, or farmed out to farmers; and these farmers collected what they could from the Village Communities, and paid the stipulated sums to the State. Considerable pressure was sometimes put on the villages for increased

revenue, and the village headman or Patel often alienated portions of the Khalsa or assessable village lands to particular persons to meet this demand. Grants were also made by the State from time to time as Inam to favoured individuals or to charitable institutions, and thus entire villages and large portions of assessable villages became alienated.

His Highness the late Maharaja Khande Rao established an Inam Commission in 1862, in imitation of what had been done in British territory, and refused to acknowledge, as alienated, lands sold or mortgaged after 1827. As the operations of a Revision Settlement had commenced in the Bombay Presidency in 1860, Maharaja Khande Rao also introduced a similar Settlement in his State in 1864, abolishing payment in kind, and substituting a fixed cash demand. Thirdly and lastly, he ~~abolished~~ the farming system, and established, as in British India, a State establishment for the collection of revenue. Every village was to have its Talati, and every group of villages its Mehta and Thanadar. When the crops were ripe, the village Talati collected the revenue and handed it over to the Mehta; the Mehta forwarded it to the Thanadar, and the Thanadar, after listening to the complaints of cultivators and settling all claims, transmitted the money to the Vahivatdar of the Taluka, who remitted it to the State Treasury. ~~This reform in procedure, effected in imitation of the British system, did away with the oppression of revenue farmers, but was not altogether a gain to the people.~~ An unvarying money demand in years of good and bad harvests, of high and low prices, ~~was~~ harsh to the cultivators. The authority of Village Communities was weakened by the dealings

of officials with individual tenants. And the assessment of individual fields was left to the will and judgment of the Settlement Officer.

Other defects vitiated Maharaja Khande Rao's Settlement. The survey was neither accurate nor fair. Measurements were incorrect. Lands were entered as assessable in excess of the actual area. Maps were only made for assessable lands, and not for the alienated lands and villages. The land was classed into three classes, but the assessment was mere guess work. The assessment was unduly high in Naosari District. In Amreli, one-third of the produce was claimed. In Okhamandal, the assessment was generally light, and almost nominal on the turbulent Vagher population. And particular classes of people, who were lazy or backward, were assessed more lightly than ~~the more industrious~~ ^{other} classes, premium was thus set on idleness.

In Baroda, as in Bombay, these Settlement operations proceeded when there was a Civil War in America, and the import of American cotton into England had consequently declined. There was a great demand for Indian cotton, the price of cotton and all other produce rose, and the value of lands increased. The cash assessment, fixed at such a time, was necessarily high; and the people in Baroda, as in Bombay, felt the severity of it as soon as peace was concluded in America, and the period of temporary prosperity was over. Distress followed, and relief operations had to be commenced in Naosari District, while agrarian riots took place in the British District of Poona.

There was no improvement under the rule of His Highness Maharaja Malhar Rao. Revenues were once

more farmed to the great men at Court, and their agents were under little control in respect of their dealings with villagers.

On the adoption of His Highness the present Maharaja, the administration of the State was entrusted to Raja Sir T. Madhava Rao. Burdened with onerous duties in all departments, Sir T. Madhava Rao was unable to introduce any radical reforms in land administration. He lowered the previous demands, but did not make an adequate reduction necessary under the new system of rigid collections.

Thus even after his reductions the demand remained high, as will appear from the following extracts from Sir T. Madhava Rao's Report of 1875-76:—

“The process of summary reduction of the land assessment has been completed. As a general rule, the maximum rate of reduction was 25 per cent., and the whole reduction may be estimated to amount to twelve lacs.”

“Our tax, even after the summary reduction, stands higher than in the neighbouring British Districts. Our Ryots, however, have probably the benefit of some compensation. Perhaps our lands are of superior quality. Our Ryots possibly raise more paying crops. Probably our Ryots have more of rent-free land intermixed with fully taxed land. It is not unlikely that the actual area cultivated by our Ryots is under-estimated.”

It is worth while quoting here the figures representing the old Land Revenue demand, remembering that the old demand was partly in Babashai coin. The following tabular statement is interesting showing the state of things a quarter of a century ago, and may be compared

with the current Land Revenue demand given under the head Land Revenue on page 64 :—

District.	1876-77.	1877-78.	1878-79.	1879-80.	1880-81.
	Rs.	Rs.	Rs.	Rs.	Rs.
Baroda ...	37,18,185	37,56,433	38,30,637	37,67,982	37,87,841
Kadi ...	27,70,393	31,38,948	32,62,417	32,42,854	32,17,079
Naosari...	16,93,910	19,69,753	19,71,903	19,60,662	19,04,938
Amreli ...	8,02,768	6,92,590	5,51,254	8,22,347	9,11,710
Total.	89,85,256	95,57,724	96,16,211	7,93,846	97,21,568

It is necessary to add that the large quantity of lands alienated under previous administrations received Sir T. Madhava Rao's attention. It was found that in the three Districts of Baroda, Naosari, and Kadi, out of 3,404 villages, no less than 339 entire villages had been alienated, and large slices to *Khalsa* or assessable villages had also been alienated. The total area of alienated villages and lands in 1877-78 was found to be between one-third and one-fourth of the total area in Baroda and Naosari, and over one-third in Kadi.

His Highness the present Maharaja assumed the reigns of administration in his own hands in 1881-82, and in the following year the new Survey Settlement operations were introduced. A proclamation was issued in 1883, forbidding the alienation of lands. Steps were taken to redeem lands which had been previously alienated. And it was declared that future alienations would not be valid, and lands so alienated would be considered and treated as *Khalsa* without the payment of any compensation to the vendee or the mortgagee. The new Survey Settlement was entrusted to Mr. F.

A. H. Elliot, a Bombay Civilian, who had been tutor to His Highness, and who had acquired an extensive and minute knowledge of Baroda by his long residence in the State. The varied and valuable information acquired by him has been carefully arranged and published in the *Baroda Gazetteer*, published in 1883, and forming Vol. VII of the *Gazetteer* of the Bombay Presidency.

(b)—SETTLEMENTS SINCE 1882-83.

The system introduced in 1882-83 is virtually the Bombay system, and has all the merits and demerits of the Bombay system. It introduced fixity and order where there was uncertainty. It equalized the Land Tax to a large extent, basing it on the capabilities of the soil. And it imposed rates which were somewhat lower than the previous demands. On the other hand, it finally took away from Village Communities that function which Village Communities had performed in India since times immemorial, and thereby weakened a useful organization indigenous to the land. It made the revenue payable by tenants dependent on the will and judgment of one Officer, without any consultation with the tenants themselves, either individually or collectively through their headmen and representatives. And lastly it swept away that *Bhagbatai* system, or payment in kind, which was still prevailing in some Talukas of Amreli, and fixed one unvarying money demand which, to the cultivator, means a larger demand on the produce of his field than the current prices of crops would indicate. The lowering of the revenue demand brought no relief, when that demand had to be met by cash payments.

Whether the gain has, on the whole, been greater than the loss, it is needless to discuss in this place. The ideal arrangement would have been to preserve what was good in the past in introducing modern reforms. It would have been possible to introduce order and method, and equality of taxation, without making the Land Tax rigid and payable in cash. And it would have also been possible to equitably fix the liability of every cultivator without weakening the village autonomy to which the cultivators had been accustomed since centuries. But the mistake made, again and again in India, has been to take too little note of the institutions of the people, and to accept too little help from their co-operation.

Nevertheless, the special merits of the Bombay system are undoubted, and the benefits conferred by it are real. The Bombay system was originally founded on the famous Joint Report of 1847. It was laid down in paragraphs 69 to 76 of that Report that the Land Revenue assessment of a District was to be fixed by an examination of the revenue settlements of previous years, and by enquiries into the past history and the capabilities of the District. When this amount was settled, it was to be distributed among the different villages and fields comprised within the District.

Fifteen years later, when the time for a Revision Settlement was approaching, the question of enhancement of revenue at the Revision Settlement came up for consideration. And His Excellency the then Governor of Bombay expressed the views of his Government in these words:—"I desire it to be understood that I do not advocate any variation in the just and

moderate proportion of the gross produce on which the present assessments are based. But as the prices of produce are yearly increasing, I see no infringement of the original conditions of the Settlement, nor will it be felt so by the Ryot, if, on the expiration of this experimental Settlement, the Government Land Tax should be readjusted according to those increased prices and other circumstances." *Minute dated 3rd March 1892.*

Two years after, the Secretary of State for India, Sir Charles Wood, afterwards Lord Halifax, laid down the limit of the Government Land Revenue demand in proportion to the nett produce in these words:—"I have to communicate to Your Excellency in Council my deliberate opinion that the share of the nett produce which may be fairly taken as the due of the Government should be assumed "at one-half." *Revenue Despatch to Madras, dated 24th February 1864.*

It is necessary to clearly bear in mind these three cardinal principles of Ryotwari Settlements in British India, which are also the underlying principles of Settlements in Baroda State. They may be briefly recapitulated thus: (1) The Land Revenue demand of a Taluka should be fixed after considering what the Taluka has paid in the past, and can pay in the future, without detriment to agricultural prosperity. (2) No enhancement should be made unless there has been a rise in prices, or there are other reasons like the increase of produce or of cultivation, justifying an enhancement. (3) No cultivator should be asked to pay more than one-half of the nett produce of his field.

By nett produce is meant the average produce of a field, minus the cost of cultivation, which last includes

the fair wages of the cultivator and his family labouring in the field, and also a fair rate of interest on his agricultural stock, such as plough, bullocks, &c. Thus if a field yields an average annual produce of the value of Rs. 60, taking good years with bad years, and if the cost of cultivation, including the wages of labour and the interest on the agricultural stock, comes to Rs. 40, the nett produce of the field is Rs. 20. And under the rule laid down by Sir Charles Wood, the Government demand should be Rs. 10 or one-sixth of the total produce of the field, which is also the maximum Land Tax according to the Institutes of Manu. If a field is very fertile, and yields Rs. 100 a year, taking good years with famine years, and the cost of cultivation including wages, &c., is only Rs. 50, the nett produce is Rs. 50, and the limit of the Government demand is Rs. 25, or one-fourth of the total produce. On the other hand, if the field is very poor, and yields an average produce of Rs. 40 only, and the cost of cultivation including wages, &c., is Rs. 30, then the nett produce is Rs. 10 only, and the Government demand is limited to Rs. 5, which is one-eighth of the total produce.

How far these three principles were strictly adhered to in the Settlements made from 1882-83, it is not possible to find out now. But it is desirable to remember these principles as the Settlements are of a recurring nature, and the principles apply to all future Settlements. It would seem that Mr. Elliot, like Sir T. Madhava Rao, hesitated to make adequate reductions in the Settlements of 1882-83 and subsequent years. In comparing the *Bhagbatai* system which he abolished in Amreli District with the

Bighoti or fixed cash assessment which he introduced, Mr. Elliot makes the following remarks:—

“I must not fail to warn Government that the sum reached by this scheme is of a realizable revenue only, that it will be reduced to a certain extent by land being left unoccupied and by arrears; secondly that in years of scarcity remissions will have to be made; thirdly that the cost of remuneration of village servants will be greater than it was. I believe the rates to be high, specially on dry crop lands, and I have been more moved not to remit too much at first, than to reach that low figures which would represent a mild *Bighoti*.” The promise of remissions has been generously redeemed.

It reflects high credit on the discernment and the sound judgment of Mr. Elliot that, although he introduced the fixed cash *Bighoti* system in imitation of the Bombay rules, he did not altogether desire to surrender the old *Bhagbatai* system. Before leaving the service of this State, he strongly recommended that in the District of Amreli, where seasons are so variable and uncertain, a *Varying Bighoti* system should be introduced. His idea was that the assessment should vary from year to year, according to the character of the harvests obtained, so that, taking good years with bad years, the Government demand would average what is now the fixed annual demand. In years of bumper harvests the Government should take more than the present demand, and in bad years they should take less. The scheme prepared by Mr. Elliot on this principle, which corresponds with the principle of the old *Bhagbatai* system, is still under the consideration of His Highness the Maharaja.

Further, with regard to some particular villages, the Gir villages of Dhari Taluka in Amreli District, Mr. Elliot actually recommended a return to the *Bhagbatai* system in bad years. He wrote :—

“ I beg earnestly to propose that the following Settlement be made for 20 years to fix the people if possible. In good years let the Gir villages above named pay a *Bighoti* which will bring in about Rs. 4,544. In bad years let them be treated as *Bhagbatai* villages paying a share of the crops equal to the one-fourth *Vajai* paying villages as at present constituted, and two annas in the rupee on the *Bighoti* charges. * * * * Let each of the Gir villages in a body, through its Patel, claim to pay *Bhagbatai* instead of *Bighoti* whenever it pleases by petitioning to the Vahivatdar to that effect on or before the 15th October. If the Vahivatdar does not think fit to allow the claim, let the Suba decide if it should be allowed or not.”

This privilege has not yet been granted to the Gir villages ; but in the meantime the State has been compelled to return to the old system of payment in kind in some of the most backward Talukas. In the forest Talukas of Songad and Vyara, a large portion of the people consists of Bhils and other uncivilised tribes who are generally known as Kaliparaj people. Rules were sanctioned in November 1903, and published in January 1904, by which the Kaliparaj tenants of the Talukas, to which the rules may be extended, are allowed the option of making payment in grain, in satisfaction of Government dues of current or past years. Such payments are permitted within the periods fixed for the instalments of Government revenue, and at rates fixed

by the Government. Some experience in the operation of these rules will enable us to judge how far these rules, or the *Varying Bighoti* system of Mr. Elliot, can be extended to other parts of the State.

The Settlements made by Mr. Elliot and his successors were generally for fifteen years, and a large number of Veros, or special taxes on agriculturists, were abolished as the new Settlement was introduced. A tabular statement showing the dates on which the new Settlement was introduced in the different Talukas is given below:—

Serial Number	Name of Taluka.	In what year the new Settlement introduced.	Period of Settlement.
1	2	3	4
	<i>Kadi District.</i>		
1	Sidhpur... ..	1891-92	15 years.
2	Patan	1893-94	"
3	Dehgaon (Atarsumba inclusive)	1894-95	"
4	Harij	1895-96	"
5	Kheralu	Do.	"
6	Visnagar	1896-97	"
7	Kadi	Do.	"
8	Mehsana	Do.	"
9	Vadaoli... ..	1897-98	"
10	Kalol	1898-99	"
11	Vijapur	1899-1900	"

Serial Number.	Name of Taluka.	In what year the new Settlement introduced.	Period of Settlement.
1	2	3	4
<i>Baroda District.</i>			
1	Padra	1888-89	15 years.
2	Dabhoi	Do.	"
3	Sinor	1889-90	"
4	Jarod	1890-91	"
5	Choranda	1891-92	"
6	Baroda	Do.	"
7	Sankheda	Do.	"
8	Tilakwada	1892-93	"
9	Petlad	} Under con- sideration.	"
10	Siswa		"
<i>Naosari District.</i>			
1	Gandevi	1892-93	"
2	Naosari... ..	Do.	"
3	Palsana... ..	Do.	"
4	Kamrej... ..	Do.	"
5	Velachha	Do.	"
6	Mahuva	1896-97	"
7	Songad	1902-03	2 years (Tentative).
8	Vyara	{ Under Set- tlement. Not introdu- ced as yet.	
9	Vajpur		
<i>Amreli District.</i>			
1	Damnagar	1884-85	15 years.
2	Amreli, except Bhimkatta.	1885-86	"
3	Kodinar	1886-87	"
4	Dhari	Do.	"
5	Okhamandal	1902-03	2 years (Tentative).

(a)—IRRIGATION CESS.

Water is found in wells at different depths in different parts of the State, and a Cess is added to the Land Assessment for the water used for irrigation, where such water is easily available. There are three different methods in which this Cess is realised in different Districts and Talukas.

According to one system, known as the *Subsoil system*, fields are charged according to the depth at which water is available, and where no water is available within a depth of about 40 feet, nothing is charged. This system is followed in the neighbouring British Districts, and the advantages of the system are that the land is taxed once for all, for its possible irrigation facilities, and no tax is added when a well is actually sunk by the cultivator. But the disadvantage of the system is that it taxes cultivators for a benefit which many of them are too poor to derive. In many parts of the State, where water is available at a depth of 30 or 40 feet, a well costs a thousand rupees or more, and cultivators cannot, as a rule, sink a well, even with the help of advances, without ruining themselves. Thus while the *Subsoil* system does not impose any new tax for improvements actually made, it imposes a general tax for improvements which cultivators may or may not be able to make.

The second system is known as the *Bagait system*, which is universally condemned by all officers who have worked it. It taxes lands all round a well as soon as a well is sunk. It is, thus, not only a tax on improvements made by the cultivators, but it often is a tax where improvements are of no avail. Lands around the new

well may or may not be benefited by the well, but the tax remains.

The third or *Kasar system* is somewhat better. It taxes, not the lands, but the well itself, so long as the water is used. The advantage of this system is that it taxes no lands unless a well has been sunk, and unless its water is actually used for irrigation. Its disadvantages are that it is a tax on improvements effected by cultivators, and has the tendency of deterring them from using the water for fear of paying the tax.

The total proceeds of the Water Cess for the last year in the different Talukas are given below:—

Baroda District.

No.	Talukas.	Water assessment.
		Rs.
1	Baroda	5,656
2	Padra	10,479
3	Sankheda ... ..	...
4	Tilakwada ... ..	...
5	Saoli and Vaghodia	3,976
6	Choranda	200
7	Dabhoi... ..	1,443
8	Sinor	411
9	Petlad and Siawa	45,758
Total ... Rs.		67,923

Naosari District.

No.	Talukas.						Water assessment.
							Rs.
1	Naosari	...	..	...	...	...	25,925
2	Gandevi	...	...	...	...	...	27,068
3	Kamrej	...	...	...	...	...	1,330
4	Palsana	...	...	...	...	...	1,371
5	Velachha and Vakal	...	...	...	...	...	...
6	Mahuva	...	...	...	..	...	1,348
7	Songad	...	...	...	...	...	...
						Total ... Rs.	57,042

Kadi District.

No.	Talukas.						Water assessment.
							Rs.
1	Kadi	...	..	...	...	...	12,231
2	Patan and Harij	...	...	...	...	...	3,529
3	Sidhpur	...	...	...	...	...	15,680
4	Mehsana	...	...	...	...	...	12,307
5	Dehgam and Atarsumba	...	...	...	...	...	7,100
6	Kalol	...	...	...	...	...	13,523
7	Kheralu	...	...	...	...	...	12,160
8	Vadnagar	...	...	...	...	...	8,633
9	Visnagar	...	...	...	...	...	2,121
10	Vadaoli	...	...	...	...	...	8,030
11	Vijapur	...	...	...	...	...	...
						Total ... Rs.	95,314

Amreli District.

No.	Talukas.	Water assessment.
		Rs.
1	Damnagar and Shiyanagar	10,965
2	Amreli	19,951
3	Kodinar	12,151
4	Dhari and Khamba	5,804
5	Okhamandal	655
Total ... Rs.		49,526

It should be noted that although the proceeds of the Irrigation Cess are shown separately in the above tabular statements, they are not levied separately but with the Land Revenue. A cultivator paying under the *Subsoil* or the *Bagait* system does not know how much he is paying for the land and how much for the water. And it has not been easy, even for the Settlement Department, to find out the exact sum which is charged for water out of the combined demand for land and water.

The question how far it is expedient to charge cultivators for wells excavated by themselves at their own cost, and to what extent the three different systems now prevailing can be modified so as not to be a tax on improvements, is receiving the careful consideration of His Highness' Government.

(d)—RECENT WORK.

Mr. Gunaji Rao Rajba Nimbalkar, B.A., was Settlement Commissioner during the two years under report. Educated at Baroda College, and then at Elphinstone College, Bombay, he obtained his degree in 1886, and

joined service in Baroda two years later. Nearly the whole of his sixteen years' service has been passed in the Survey Settlement Department ; his ability has been recognised by successive Officers ; and his knowledge of Persian, which he took up as his second language in his University Examination, has been of great use in dealing with old documents. In 1893 he received a gold ornament as a gift from His Highness the Maharaja " for exceptionally good work " ; and in 1903 he was confirmed in the post of Survey and Settlement Commissioner.

The most important work done during the two years under review is shown below :—

- (1) *Vyana Taluka*.—A portion of the Taluka has been surveyed.
- (2) *Songad Taluka*.—Settlement for 1902-03 was completed in 1903-04. The new rates were proclaimed to the tenants in 1903.
- (3) *Okhamandal Taluka*.—The Settlement of this Taluka was nearly completed in 1903-04.
- (4) *Petlad Taluka*.—This Taluka was under Settlement, and the proclaiming of the new rates was commenced in April 1903, and completed in September 1904 ; but the new Settlement is found to be unworkable for reasons given below.
- (5) Five Inami villages in the District of Kadi, two of which had been resumed, were settled in 1902-03. Five more Inami villages in the Districts of Baroda, Kadi, and Naosari, three of which had been resumed, were settled in 1903-04.

The first two Talukas mentioned in the above list, Vyara and Songad, are Jungle Talukas in the District of Naosari, and are largely peopled by races like the Bhils. Special rules for the protection of these Kaliparaj tenants have been sanctioned by His Highness the Maharaja, as has already been stated before.

Okhamandal Taluka forms the farthest western point of the peninsula of Kathiawar, and contains the holy town of Dwarka, the ancient seat of Krishna, and frequented by thousands of modern Hindu pilgrims from all parts of India. But the Taluka itself is poor and unproductive, and its management and administration cost the State far more than the revenue derived from it. Proposals are under consideration to connect Dwarka by rail; the harbour will then attract some traffic; and it is likely that the trade and importance of the whole Taluka will thus be revived.

Petlad, on the other hand, is one of the richest Talukas in the State, and is famed for its tobacco, of which some account has been given elsewhere. But the difficulty in settling this Taluka arises from a peculiar tenure called the Narva tenure, prevailing here from centuries. Each village is owned by families who are called Narvadars, and are no doubt descended from a common ancestor who established and populated the village. The Narvadars had their respective shares in the village lands, and paid the Government revenue according to their shares. But in times of disorder or pressure from State Officials, portions of the Narva lands were alienated by sale or mortgage, and it is difficult to realise from the remaining Narva lands the

total assessment which was due from the village. Threatened with the full assessment, the Narvaders of 74 villages have relinquished their Narva rights, and there is little doubt, that those of the remaining 17 villages would follow suit, rather than bear the burden of the full assessment. If these relinquishments were accepted, the Narvaders would sink to the position of ordinary tenants in Ryotwari villages, and one more old institution of the land would be swept away. The entire question is now under enquiry by the present Settlement Commissioner, Mr. Seddon; and His Highness the Maharaja will issue orders on the subject after completion of the enquiry.

Garas Office.—Of a far different character is the Garas tenure. When the Imperial power of the Moghals was breaking up, and the Mahratta invasions began, the old Garassias or holders of land were in power, and a new set of Garassias sprang into existence, living in the high lands of Gujrat, and, like so many Rob Roys, levying blackmail from the peaceful population of the plains. With the return of the peaceful times the claims of the Garassias gradually took the form of grants in land, or money, or grain. And some of the Garassias obtained a guarantee from the British Government that the Gaekwar of Baroda would not interfere with their Garas rights and grants.

In 1862, His Highness the late Maharaja Khande Rao imposed a tax of two annas in the Rupee on Garas allowances, and even attached such allowances. The Garassias objected, and a British Officer enquired into the claims of the Rewa Kantha Garassias from 1864 to 1872. A full Memorandum was submitted by Mr. Melville,

Agent to the Governor-General, in 1877, in which he held that :—

“ No Inam Commission Tax should be levied on Garas lands or *Haks* [rights] in Baroda territory held by Zamindars or their Bhayats or others, to which the British guarantee attaches directly or indirectly.

“ On the other hand the right of the Darbar to impose the tax on the *Vanta* lands and other Garas rights of unguaranteed persons in Baroda is certain.”

Mr. Ramlal Hiralal Desai, B.A., L.L.B., was in immediate charge of the Garas Office until December 1903, and was then transferred to the Settlement Department. The work of the office during the two years under review, consisted in enquiries into new claims made by guaranteed Garassias, enquiries into succession and miscellaneous cases, and also some enquiries into claims by co-sharers. Final appeals in the case of the guaranteed Garassias are heard by the Residency.

A special feature in the work of the Garas Office, introduced in 1903-04, is the inspection of Garas work and records in the different Talukas. The Talukas of Dabhoi, Choranda, Nacsari, Padra, Petlad, and Baroda, were inspected during the last year.

Barkhali Office.—Rules of succession to Barkhali or alienated lands—other than Vatan and Guaranteed Garas—were sanctioned by His Highness the Maharaja in April 1904. And it has been decided that, from August 1905, the whole of the Barkhali Office will be transferred from the Settlement to the Revenue Department. The principal Devasthanams or religious institutions have been transferred from the Palace Office to the Barkhali Office.

- Expenditure.* The total expenditure of the Survey and Settlement Department during the two years under report is shown below :—

1902-03.	1903-04.
Rs. 1,57,290	Rs. 1,59,082

The average cost for measuring every Bigha of land was reduced from $2\frac{3}{4}$ annas to $2\frac{1}{4}$ annas, and that of classification from 3 annas to 1 anna, during the last year as compared with the previous year.

Mr. C. N. Seddon, of the Bombay Civil Service, returned from furlough in November 1904, and took charge of the office of Settlement Commissioner. He is at present employed in the Settlement of Padra Taluka, and in making inquiries into the difficult questions raised in the Taluka of Petlad. His suggestions in respect of the arrangements made for the relief of the people in the present famine year have been of great value; and his recommendation to remit the ~~well~~ irrigation cess at Padra, in the current year, has been accepted by His Highness the Maharaja.

VI.—SELF-GOVERNMENT.

(a)—THE VILLAGE PANCHAYET.

The village is the basis of the Indian Polity. From ancient times the instincts of the people have been in favour of Village Self-Government, and Village Communities were the spontaneous growth of the genius of the Indian people. In ancient Hindu works, two thousand years old, as well as in the reports of the East India Company's Servants, scarcely a hundred years old, we find accounts of self-contained villages, administering their own affairs, and paying their quota of revenue to the powers that be. History, as it is written, concerns itself with the wars of kings and the rise and fall of dynasties; the annals of the people within their own Communities find no mention in the pages of Ferishta or of James Mill and Wilson. And yet, if we turn from the court to the corn-field, we find that the mass of the Indian agricultural people enjoyed a system of Self-Government through long ages, when the same classes of people were little better than serfs in many countries of Europe. Liberty is ancient, Despotism is modern,—is a French saying which is as true of India as of any modern country.

Nothing proves more strongly the vitality of the village institution in India than their survival after the break-up of the Moghal Empire, and the century of anarchy, disorder, and wars, which followed. The British and the French contended for power in Madras; Hydar Ali and Mir Kasim strove against the new invaders in Mysore and Bengal; the Mahratta and the Afghan endeavoured to wrest the supreme power of Delhi; and

hordes of Pindaris looted on their own account, and harried peaceful villagers both in Hindustan and the Deccan.

In this universal scene of disorder the ancient Village Communities survived. They stood like little islands amidst a sea of invasions ; and the peaceful cultivator lived in his ancestral home, ploughed his ancestral field, and grazed his cattle, as he saw the waves of destruction sweep round. The contending parties did not spare villages. But if a village was burnt down, the cultivators built it after the invaders had passed. If war contributions were mercilessly extorted by one conqueror after another, the village elders, with their excellent fiscal organisations, raised it from the holders of land in proportion to their liabilities, and satisfied the demands. And if a village headman or Patel was killed by unruly soldiers or dragged into slavery, his son stepped into his place and assumed his judicial and revenue functions according to immemorial custom. The little self-governing village republic seemed to be indestructible.

When the East India Company ultimately secured large territories in Madras and Bombay and Northern India, in the early decades of the nineteenth century, they found the Village Community still a living institution.

It would be out of place in this report to go into any minute details concerning the constitution and work of these Communities as described in the early records of the Company ; but one or two short extracts, describing their general character, would perhaps serve a useful purpose.

Of the Village Communities in Madras it is written :—
 “ Under this simple form of Municipal Government, the

inhabitants of the country have lived from time immemorial. The boundaries of villages have been but seldom altered, and though the villages themselves have been sometimes injured, and even desolated by war, famine, and disease, the same name, the same limits, the same interests, and even the same families have continued for ages. The inhabitants give themselves no trouble about the breaking-up and divisions of kingdoms, while the village remains entire, they care not to what power it is transferred or to what sovereign it devolves ; its internal economy remains unchanged, the Patel is still the head inhabitant and still acts as the petty Judge and Magistrate and Collector or Renter of the village.”
—*Fifth Report*, 1812.

Of the Village Communities of Bombay it is written :—
“ In whatever point of view we examine the Native Government in the Deccan, the first and most important feature is the division into villages and town-ships. The Communities contain in miniature all the materials of a State within themselves, and are almost sufficient to protect their members if all other governments are withdrawn. * * * The Patel is head of the police and of the administration of justice in his village, but he need only be mentioned here as an officer of revenue. In that capacity he performs on a small scale what a Mamlatdar or a Collector does on a large ; he allots the land of such cultivators as have no landed property of their own and fixes the rent which each has to pay, he collects the revenue for Government from all the ryots, conducts all arrangements with them, and exerts himself to promote the cultivation and the prosperity of the village.”—*Elphinstone's Report on the Territories conquered from the Peishwa*, 1820.

Of the Village Communities in Northern India it is written :—"The village communities are little republics, having nearly everything that they want within themselves, and almost independent of any foreign relations. They seem to last where nothing else lasts. Dynasty after dynasty tumbles down, revolution succeeds revolution ; Hindu, Pathan, Moghal, Mahratta, Sikh, English, are masters in turn, but the village communities remain the same. In times of trouble they arm and fortify themselves, a hostile army passes through the country, the village communities collect their cattle within their walls, and let the enemy pass unprovoked. If plunder and devastation be directed against themselves, and the force employed be irresistible, they flee to friendly villages at a distance, but when the storm has passed over they return and resume their occupations. If a country remains for a series of years the scene of continued pillage and massacre, so that the villages cannot be inhabited, the scattered villagers nevertheless return whenever the power of peaceable possession revives. A generation may pass away, but the succeeding generation will return. The sons will take the places of their fathers, the same site for the village, the same position for the houses, the same lands, will be reoccupied by the descendants of those who were driven out, when the village was depopulated ; and it is not a trifling matter that will drive them out, for they will often maintain their post through times of disturbance and convulsion, and acquire sufficient strength to resist pillage and oppression, with success. The union of village communities, each one forming a separate little State in itself, has, I conceive, contributed more than any other cause to the preservation of the

people of India through all revolutions and changes which they have suffered ; and it is in a high degree conducive to their happiness and to the enjoyment of a great portion of freedom and independence. I wish, therefore, that the village constitutions may never be disturbed, and I dread everything that has a tendency to break them up. I am fearful that a Revenue Settlement with each individual cultivator, as is the practice in the Ryotwari Settlement, instead of one with the Village Community through their representatives the headmen, might have this tendency."—*Sir Charles Metcalfe's Minute*, 1830.

The last sentence is important, as it indicates precisely the cause which has broken up this ancient institution in India. Other causes have contributed to this effect. A more centralised administration has necessarily weakened the power of Village Communities. The withdrawal of judicial, criminal and police powers from village officials has necessarily rendered them more or less useless for settling disputes and keeping order in the village. But it is the introduction of the Revenue Settlement with every individual cultivator which has taken away the last and most useful function of village organisations, and left them the mere forms of a government which has passed away. The result is more far-reaching than would seem at first sight. The village, as a unit of the Indian political organisation, ceases to be a unit. The authority of elders and headmen ceases to have any force. The powers, privileges, and responsibilities of Self-Government, which were the heritage of centuries, cease to exist. The bonds which held little agricultural communities together, living, moving, act-

ing as organic bodies, are loosened. Common rights, common sharing of burdens, common petitions against fiscal demands, common action in emergencies, terminate. Each individual tiller is isolated from his co-villagers, and is a separate unit in the eyes of Government. Each stands ignorant and feeble before a powerful Government, and pays the revenue which the Settlement Officer demands, or silently surrenders his land. Among the many undoubted improvements in the modern methods of administration, the ignoring of Village Communities in India will not be classed as one.

The mistake made has been found out since. The inertness of the modern Indian village strikes the most casual observer, and reacts on the administration. The want of life in agricultural communities deadens administrative endeavours and bars progress. Efforts are being made to create new Village-Unions. Powers are being conferred on village bodies over local affairs. Even the bestowal of judicial and police powers, to a limited extent, is in contemplation.

It is satisfactory to note that in the Hindu State of Baroda, endeavours were made from the commencement of the Settlement operations to preserve as much of the old forms of self-government in villages as was possible. It was due to his Highness the Maharaja's personal exertions that all the old land-marks were not swept away. In a report, dated 1893, Mr. F. A. H. Elliot, then Settlement Officer, speaks of the scheme of maintaining the old village services as a scheme which "His Highness the Maharaja has personally fostered and made his own. His generous wish is that the village should once again be self-ruling." And provision was

made in every village to appoint a Panchayet, and to maintain the services which it enjoyed before the introduction of the Survey and Settlement. A deduction was made from the revenue demand of every village for the maintenance of these village services.

A good beginning was thus made from the commencement of the present system of Settlement. The entire cost of the State was estimated to be $12\frac{1}{2}$ lacs (Rs. 12,58,957). But the service lands held previously and the old cash payments were estimated at Rs. $9\frac{1}{2}$ lacs a year, (Rs. 9,50,946). The additional annual expense which His Highness's Government undertook was, therefore, 3 lacs (Rs. 3,08,011). At this cost the State was able to maintain a village service in all the villages in the 32 Talukas of the State. And it is interesting to note down the number of men who were so entertained in each service.

Patels or headmen	2,604
Talatis or accountants	1,227
Havildars or orderlies	2,042
Rakhas or village watchmen	8,915
Bhangis and Dheds or sweepers	6,691
Khalpas, cleaners of carcasses	294
Hajams or barbers	2,835
Kumbhars or potters	2,167
Sutars or carpenters	1,170
Lohars or blacksmiths	993
Vethias or coolies	604
Machis or fishermen	6
Mehtajis or school-masters	632
Men who drew water from wells	1,529

Mr. Elliot speaks with justifiable pride of this village service as a service which "cannot be paralleled on this side of India." Hereditary claims were recognised in

filling up the service. The names of the servants with particulars about their services and remuneration were registered. And they were allowed the option to hold land on service tenure or to receive their remuneration in cash. Most of them preferred the latter system. The Patel got Rs. 12 in backward villages, but in well-to-do villages Rs. 30 a year or more. The school-master got Rs. 36. It was His Highness's own idea that a school-master should be added to the body of village servants, and that one should be provided in every village which had no regular school and could produce 16 scholars of either sex. Under this rule 632 new schools were established in the State, *i.e.*, about twenty in each Taluka,—between 1891 and 1898. How this beneficent provision has contributed to the extension of primary education in Baroda will be noticed in a subsequent section.

But the good work was only half done yet. The unity of villages was preserved to some extent under Patels and Talatis ; common services were provided, and a school-master was set to work in every village. The time has now arrived for making a further advance, and this brings us to the transactions of the current year.

Early in 1904, the Maharaja decided to introduce the elective system in the village Panchyets, and to bestow on them ampler powers of village administration. And His Highness also conceived the idea of building up a complete system of Representation from the villages to the Talukas, from the Talukas to the District, and from the Districts to a State Legislative Council.

The measures have been passed in the current year. The new rules for the organization of Village Panchyets provide that every village with a population of one thousand or more shall have a Panchayet of its own ; and when the population is

less, villages shall be grouped together and have a common Panchyet. The members of the Panchyet shall not be less than five, or more than nine in number ; one-half of them shall be appointed by the District Officer or the Naeb Subah, and the other half shall be elected by the cultivators themselves. The Patel shall be the President of the Village Panchyet, and the Accountant and the School-master shall be *ex-officio* members. The supervision of village roads, wells, tanks, and schools, of Dharamshalas, Chowras and Devasthanas, of model farms and all Government or common property, shall vest in the Panchyets. They shall help in the work of medical relief and of famine relief in times of emergency. They shall co-operate with village Munsiffs in settling civil disputes, and with Sub-registrars in their official work. They shall see that the boundary marks in the fields are kept in order, and that the village cattle pound is properly managed. They shall hold monthly meetings ; and each group of villages shall return one member to the Local Board of the Taluka in which the villages are situated.

In most villages in the State, Panchyets have already been formed according to these new rules.

(b)—TALUKA BOARDS AND DISTRICT BOARDS.

The Local Self-Government measure passed in the current year provides for the creation of a Taluka Board for each Taluka and a District Board in each District. The failure of the last monsoon, and the scarcity which has already begun to be felt in many parts of the State, were at one time thought to be unfavorable to the development of this scheme. But His Highness the Maharaja felt that Local Boards would be a help to our famine relief operations, and therefore pressed for the early organization of these Boards, so that they might be in working order when the famine was at its worst. As regards the constitution of the Taluka Boards, it has been provided that all the villages in a Taluka shall be divided into a number of groups, and each group of villages shall return a Member to the Taluka Board. Similarly, each separate Municipality in

the Taluka shall return a Member. • And lastly, all the alienated villages in the Taluka shall have the privilege of choosing a Member. The persons thus elected shall form not less than one-half of the total number of Members, the other half, or less than half, being nominated by Government. Of the nominated members not more than half shall be Government servants, and the Naib Subah shall be the chairman of the Taluka Board.

As regards the constitution of the District Boards, it has been provided that each Taluka Board within the District shall elect one or more Members of the District Board, and each Municipality with a population of over ten thousand, situated within the District, shall also send up a Member. These, with one Member elected by alienated villages, shall be the elected Members of the District Board, and their total number will be not less than one-half of the total number of Members. The other half, or less than half, shall be nominated by Government; and among nominated members not more than one-half shall be Government servants. The District Officer shall be chairman of the District Board.

The total number of Members fixed for the District Boards of the four Districts of the State are shown below:—

District.		No. of elected members.	No. of members nominated. (Not including the President.)
Baroda	...	16	16
Kadi	...	20	20
Nasari	...	10	10
Amreli	...	7	7

The member fixed for each Taluka Board is shown in the statements given below District by District.

Baroda District.

Name of Taluka.	Number of elected members.	Number of nominated members. (Not including the President).
Choranda	10	10
Dabhoi	10	10
Tilakwada	4	4
Padra	10	10
Petlad	13	13
Siswa	7	7
Baroda	10	10
Vaghodia	7	7
Saoli	8	8
Sinor	8	8
Sankheda	8	8

Naosari District.

Name of Taluka.	Number of elected members.	Number of nominated members. (Not including the President).
Kamrej	9	9
Gandevi	6	6
Naosari	9	9
Palsana	7	7
Mahuwa	7	7
Velachha	8	8
Vyara	8	8
Songad	8	8
Vakal	8	8
Vajpur	8	8

Kadi District.

Name of Taluka.	Number of elected members.	Number of nominated members. (Not including the President).
Kadi	10	10
Kalol	10	10
Kheralu	10	10
Dehgam	9	9
Patan	12	12
Mehsana	10	10
Vadaoli	10	10
Visragar	9	9
Vijapur	9	9
Sidhpur	10	10
Harij	6	6
Atarsumba	6	6

Anreli District.

Name of Taluka.	Number of elected members.	Number of nominated members. (Not including the President).
Amreli	9	9
Okhamandal	7	7
Kodinar	8	8
Damnagar	6	6
Dhari	8	8
Khamba	5	5

The duties vested in Taluka Boards and District Boards are :—The construction of roads, tanks, wells, and water works ; the management of Dharamsalas, dispensaries, and markets ; the supervision of vaccination, sanitation, primary education, and arboriculture ; the undertaking of relief measures on a small scale in times of famine ; and generally such other public duties within their respective jurisdictions as may be entrusted to them. The proceeds of the Local Cess, and such other funds as may be assigned for the purpose from time to time by His Highness the Maharaja, shall be devoted to the performance of these works.

(c)—STATE LEGISLATIVE COUNCIL.

Lastly it is proposed to complete the system of Representation in this State by the creation of a 'Legislative Council for the State. And as the Village Panchyets elect some Members of the Taluka Board, and the Taluka Boards elect some Members of the District Board, it is proposed that the District Boards shall return some Members to His Highness's Legislative Council.

The Bill is still under consideration. It is proposed, as has been stated elsewhere, that the Council shall consist of 18 Members, including the Diwan who shall be President. One-third of the Members shall be elected thus :

4 returned by the four District Boards.

1 „ „ Baroda Municipality.

1 „ „ the Sardars of the State.

The remaining two-thirds shall consist of *ex-officio* members and members nominated by Government. Bills passed by the Council shall require His Highness's sanction, and His Highness shall have the power to veto any Bill.

(d)—MUNICIPALITIES.

The expenditure of the Baroda Municipality during the years under review are shown in the following table :—

Heads.	1902-03.	1903-04.
	Rs.	Rs.
Establishment	30,932	30,383
Roads	89,383	67,308
Wells and tanks	9,748	1,750
Buildings	8,554	5,261
Conservancy	63,728	64,004
Watering roads	19,757	14,608
Lighting	14,600	18,007
Filling up Bhimnath tank	13,249	3,091
Other charges		
Total	2,49,951	2,04,412

While the expenditure of the last year exceeded two lacs, the purely Municipal revenue was only Rs. 56,850, out of which Rs. 40,000 came from the privy cess. There is in fact no house-tax or any general assessment of property, and the difference between the income and the expenditure, varying between $1\frac{1}{2}$ and 2 lacs a year, is made up by a contribution generously made by Government.

The work of the Municipality, too, is managed by a Government servant, Mr. Maneklal Sakarlal Desai, M.A., assisted by a Committee. Mr. Maneklal has acquired considerable experience in the work, and carries it on with vigour. But the sanitary condition of the city is unsatisfactory; and the by-lanes and "Poles" are filthy. It has been decided by His Highness to transfer the

administration to a body of Commissioners, partly elected and partly nominated, as will be described further on. It is expected that the co-operation of the citizens themselves will secure a more thorough administration and improved sanitation.

51.35 miles of pucca roads and 24.7 miles of kacha roads were looked after by the Municipality. The watering of roads was done by contract. 23 fires occurred in 1902-03 and 17 fires in 1903-04. There is a fire-brigade in the town which cost Rs. 2,887 in 1902-03 and Rs. 2,813 in 1903-04. Several public latrines were opened in each year.

The system of levying the privy cess is very defective and is unduly severe on the poor. The question has been referred to a Committee of Officers for a radical change and reform.

The following tables give the population and the expenditure of the 35 District Municipalities.

Baroda District.

Towns.				Population.	Government grant for expenditure in Rupees.
Petlad	...	...	...	15,282	3,144
Padra	...	...	...	8,289	1,705
Sinor	...	.	...	5,186	1,067
Dabhoi	...	...	...	14,084	2,887
Sojitra	...	...	...	10,578	2,176
Vaso	...	...	...	8,765	1,802
Saoli	...	...	...	4,686	956
Bhadran	...	...	...	4,761	979
Sankheda	...	...	...	4,296	848
Makarpura	...	...	...	1,156	2,110

Kadi District.

Towns.	Population.	Government grant for expen- diture in Rupees.
Kadi	13,070	2,689
Kalol	6,465	1,380
Mehsa da	9,393	4,690
Kheralu	7,617	1,567
Vadnagar	13,716	2,822
Visnagar	17,268	3,537
Sidhpur	14,743	3,034
Unjha	9,800	2,016
Patan	31,402	13,457
Ohanasma	8,183	1,663
Vijapur	8,510	1,730
Dehgaon	4,984	1,005

Naosari District.

Towns.	Population.	Government grant for expen- diture in Rupees.
Naosari	21,451	4,414
Billimora	4,693	1,256
Gandevi	5,927	1,716
Kathor	4,467	907
Vyara... ..	6,117	1,061
Songad	2,533	828

Amreli District.

Towns.				Population.	Government grant for expenditure in Rupees.
Amreli	...	...	...	17,997	4,115
Damnagar	...	...	...	3,651	751
Dhari ...	...	...	...	4,262	877
Kodinar	...	...	...	6,664	1,371
Dwarka	...	...	...	7,535	1,885
Beyt ...	...	...	...	6,615	927

The Government grants shown in the above tables virtually represent the whole municipal incomes in respect of all the towns except Naosari, Billimora, and Gandevi. The other sources of income, like sale of manure, &c., do not bring a hundred rupees in the case of any of those towns ; and there is no house tax or general assessment of property. In Naosari, Gandevi and Billimora, however, there are wheel taxes and tolls, which considerably add to the Government grant. The total annual incomes of those three towns are about Rs. 19,000, Rs. 5,000, and Rs. 5,000, respectively.

All these Municipalities are entirely managed by Vahivatdars, the executive heads of Talukas. The people are yet in the happy condition of paying no Municipal taxes and having no Municipal constitutions. The Government pays virtually all their expenses, and Government Officers manage their affairs.

But simultaneously with the introduction of Self-Government in rural areas by the creation of partially elected Panchayets, Taluka Boards, and Local Boards, His Highness the Maharaja has decided to introduce Self-Government in some of the more

important Municipal towns. The town of Baroda and eight other large towns were selected for the purpose, but one of them, Petlad, has been temporarily excluded. The new provisions, therefore, will apply from the commencement of the current year to Baroda and the following seven District towns, viz., Dabhoi, Patan, Visnagar, Sidhpur, Naosari, Gandevi and Amreli.

In place of specific grants, such as are made from State funds to these District towns, sources of revenue yielding sums adequate for their present expenditure have generally been assigned to them. Where such sources were not available specific grants have been continued. There will be no need therefore for these District towns to impose fresh taxation in any case if the sources of revenue assigned to them be carefully developed. The freedom from house tax which they now enjoy may be maintained in the future, if the new Municipal Commissioners wisely manage their concerns. The boon of Self-Government is granted to them without any addition to taxation.

With regard to Baroda, some fresh sources of revenue are assigned to the town, but the difference between the income and the expenditure still remains to the extent of Rs. 1,30,000. His Highness has therefore directed a specific grant of this sum from the State funds to be given to the town every year, for five years to come. It is expected that, within these five years, the Municipal Commissioners will so manage their own concerns, reduce their expenditure, and develop their income, that the Government grant will not be necessary after that period. But no positive orders have been passed on this point; and the Maharaja has expressed his willingness to consider any reasonable grounds which the citizens of Baroda may urge hereafter on this subject.

These are the financial arrangements under which a system of Self-Government is started in Baroda town and the seven

foremost District towns of this State. A Bill based on Bombay Act III of 1901 has been published in the Official Gazette, and will be passed into law after necessary modifications in view of public criticism. Rules will then be framed in accordance with the Act for the constitution and management of each of the eight municipalities.

It is necessary to add that the work of organizing Self-Government, both in rural areas and in towns, according to the wishes of His Highness, has been performed, largely by Diwan Bahadur Samarth, whose onerous work in connection with the Revenue Department has been described in a preceding Section. Mr. Samarth's extensive and intimate knowledge of the condition of the people of this State, combined with his real sympathy with all measures leading to their advancement, marked him out as the fittest officer for this work. His Assistant, Mr. Chhotalal Patel, has made himself useful in expediting the formation of village Panchyets throughout the State. And the Sanitary Commissioner, Dr. Dhurandhar, being in official charge of the Municipalities, has zealously co-operated with Mr. Samarth in organizing measures and framing rules for introducing Self-Government in the advanced towns.

VII.—FINANCE.

(a)—HISTORY OF THE DEPARTMENT.

Mr. Dayabhai Harjivandas Nanavati, B.A., of the Bombay University, held the post of Accountant General in Baroda during the years under report, and proved himself a careful, sound, and successful financier. His early training in commercial houses made him proficient in business transactions ; and his long service in subordinate posts, in the Bombay High Court and in the District Court of Ahmedabad, made him familiar with British methods of work. He joined the Baroda service in 1878, and like Diwan Bahadur Samarth and Mr. Justice Abbās Tayabji who joined in the following year, he has proved the wisdom of Sir T. Madhava Rao's selections. Mr. Dayabhai served for 17 years in the Garas Department, and was then, for one year, Secretary to His Highness the Maharaja ; and with the varied experience thus acquired he was appointed Accountant General in 1896.

A great reform in the Accounts Department was introduced in 1892 by the late Mr. Rajani Nath Ray, whose services were lent to this State by the Indian Government. The great change which he introduced was to bring the Accountant General in direct touch with every Taluka Treasury. The Taluka Treasuries were made the smallest units both of Revenue and of Financial Accounts. The Taluka Treasuries were the place where the two accounts were compared and checked. And the Taluka Treasuries sent Monthly Statements direct to the Accountant General, so as to keep him posted in the receipts and expenditure of the entire State.

"It is accordingly ordered," wrote His Highness on the 3rd March 1892, "that the Subahs' Accounts Offices for the compilation of Treasury Accounts be abolished from the date of the re-introduction of the Monthly Accounts from Talukas, which will be sent direct to the Accountant General."

Another great principle which Mr. Ray insisted upon, and introduced in this State, was the absolute independence and the supreme authority of the Audit Department. In British India, he wrote, "not only is the independence of the Audit Department preserved, as against the Local Government but the Government of India itself respects it." "And the Audit Department," he added, "must be armed with sufficient powers to enforce compliance with the orders of the Supreme Authority."

Other reforms introduced by Mr. Ray concerned the working of the Treasury Department. Some modifications have been made in his rules, within the twelve years which have elapsed since, but the principles he laid down are strictly adhered to.

An important controversy took place in 1896 to convert the old Sikai currency of Baroda into Babashai currency for the simplification of accounts: Mr. Dayabhai, then Secretary to His Highness, maintained, against the Minister and the Accountant General, that Rs. 100 Sikai to Rs. 109-6 Babashai was the correct rate for making the conversion; and his opinion was finally accepted by the Maharaja.

But his difficulties were not yet at an end. The closing of the mints in British India to the free coinage of silver in 1893 had begun to raise the value of the British

Indian rupee, and thus to lower the relative value of the Baroda Babashai rupee. The necessity of assimilating the Baroda currency to the British Indian currency began to be felt. A small State like Baroda, surrounded on all sides by British territory, has no fiscal independence. Its transactions in trade and finance are all with British India, and whether the policy of the Indian Government was wise or unwise, the State of Baroda was compelled to follow its lead for the facility of trade and monetary transactions. In 1900, the British Indian currency was introduced, 130 Babashai rupees being considered equivalent to 100 British Indian rupees. And it is worth recording that all revenue demands were proportionately reduced when made payable in the rupees of higher value.

The adjustment of the copper currency was also an arduous work. Merchants in the Central Provinces of India freely took the Baroda Babashai copper coins to the extent of lacs of rupees and passed them as token coins, and the Baroda pice therefore passed at the value of the British pice, i.e., 64 for the rupee. But in 1893, the Government of India issued a resolution forbidding the possession of more than 64 Babashai pice. The result of the prohibition was that Baroda pice, worth several lacs of Rupees, returned to Baroda at great discount, and the value of the pice fell from 64 to 100 for the rupee. In 1894, accordingly, His Highness was compelled to purchase the superfluous copper coin from the market in order to raise its price to the normal value, and thus save the poor people from a hardship. The transactions went on for years, and were completed by Mr. Dayabhai in 1897, and the superfluous copper was

sold profitably to British and American merchants at a time when the value of copper was high.

In the matter of sound investments, too, and in improved methods of work and timely preparation of budgets, a great deal has been effected by the present Accountant General in recent years. In the famine year of 1899, the State of Baroda found it necessary to raise a loan for famine relief operations, but none could be obtained from Indian Banks under 6 per cent. interest. The Accountant General accordingly arranged with London financiers to raise the necessary loan of a crore of rupees, or nearly £700,000, on 4 per cent. interest. A great saving was thus effected to the State.

(b)—WORK OF THE DEPARTMENT.

The function of the Department is three-fold, *viz.*, audit, accounts, and finance.

As an Audit Department it has to examine all vouchers of expenditure. If they appear on examination to be objectionable in any way, they are not passed but are held under objection till explanation is received. On receipt of the explanation the vouchers are either passed or rejected.

As an Account Department it has to tabulate the receipts and expenditure of the whole Raj under their respective heads and sub-heads, and to compile therefrom monthly and yearly statements of accounts.

As a Finance Department it has to prepare the budget statements of the estimated receipts and expenditure for the succeeding year, and to submit the same for the orders of the Maharaja at least three months before the year commences. It has to see whether the revenues

are increasing or decreasing, and to inform the Government of the chief causes of such fluctuations. It has to suggest means for the curtailment of expenditure, and to advise the Government on all questions which directly or indirectly affect the finances of the State.

Some work of a special character was done during the period under review which deserves mention.

It has already been stated that, during the famine period, the State had borrowed nearly one crore of rupees on the security of Government Paper from the London Market at a very reasonable rate of interest, *viz.*, 4 per cent. per annum. The loans were raised for one year at first, and were afterwards renewed for one year more. At the end of the second year, when the price of the Government Promissory Notes had gone above 97, a portion of the loan was paid off by selling the Government Paper; but loans amounting to £140,000, that is 21 lacs, were renewed for a further period of six months. The whole of these 21 lacs was paid off in May and June 1903.

In auditing the expenditure of the Petlad-Cambay Railway, constructed at the joint expense of the Baroda and Cambay States, Mr. Kilabhai D. Dalal, Assistant Accountant General, P. W. Branch, detected an error in the accounts made by the Railway authorities of about Rs. 40,000. The Railway authorities, who were entrusted with the work of constructing the line from Petlad to Cambay, charged nearly Rs. 40,000 to the Baroda State, instead of the Cambay State, to which the sum should have been debited. The Railway authorities, after a good deal of correspondence, admitted their mistake, and His Highness' Government got back about Rs. 40,000 in all from the Cambay State.

The same officer, Mr. Kilabhai, was able to detect some errors in the Railway accounts of expenditure, while auditing them at Bombay. The Railway authorities had not given credit to the Kalol-Vijapur Railway of His Highness's Government for certain materials dismantled from Marthella quarry-siding. Correspondence is still going on, and on receipt of a final reply the necessary adjustments will be made in favour of the Kalol-Vijapur Railway. The sum likely to be obtained is estimated at Rs. 2,000.

Mention has been made of the introduction of the British Currency into Baroda. As Babashai copper coins were not acceptable at the Railway Stations and the Post Offices, people found great inconvenience in using them, and therefore gradually began to give preference to the British copper currency.

The demand of Babashai copper coins has thus decreased, and these coins have come back continuously to the Government treasuries. Steps have been taken to sell the stock in hand, and the sale, when finally completed, will bring about Rs. 70,000.

When the Babashai silver currency was changed into British silver currency, the rate for converting the Babashai rupees into British rupees was fixed at Rs. 130 Babashai for Rs. 100 British. As regards the tribute which the British Government recover for His Highness's Government from the Rewa Kantha, Mahi Kantha, Palanpur, and Rajpipla Chiefs, the former Government have, after much correspondence, decided to accept this rate of exchange.

There were some old cases of jewellers awaiting final settlement in the Naeb Diwan's Office. Large sums

of money had been advanced to them in lieu of their claims for certain ornaments sold by them to His Highness the late Maharaja Malhar Rao. These sums stood in the Raj Accounts in the names of the jewellers as debts due by them to the State. The Accountant General submitted his proposals to get these sums adjusted. Two cases were settled during the last year, and one case is still pending in the Naeb Diwan's Office.

A very large stock of documentary stamp papers of high value was lying in store since they were bought some 18 years ago. There was no demand for them here. A proposal was, therefore, submitted to reduce the value of them all to two anna stamp papers which are always in demand. The proposal was sanctioned, and all the stamp papers, more than three hundred thousand in number, were turned into two anna stamp papers.

A hand book of the Civil Account Code was a great desideratum, and was prepared and published last year. Mr. Balvantrao Abaji Patwardhan, Assistant Accountant General, Main Branch, devoted much of his time in preparing it. It contains the whole information required for the guidance of treasury officers and others who have to deal with the treasuries.

There was a separate Account Department under the Conservator of Forests. All money, paid into the Government Treasuries on behalf of the Forest Department, was not credited to its proper head at once, but was credited under a separate head. Similarly all money, drawn from any Treasury by the Forest Department, was not debited to its proper head, but it was debited under a separate debit head. This practice was

discontinued last year in consultation with the Sar Subah. Military receipts and expenditure, also, which were formerly shown under the remittance head, have now been ordered to be taken to their respective heads at once.

Mr. Kilabhai had rendered very valuable services to the State in 1896 by detecting a very material error going on for years. The Railway Company did not give His Highness's Government any share in the receipts for terminal charges. The error was subsequently admitted by the Railway authorities, and they paid Rs. 1,20,000 for previous years, and began, thenceforth, to apportion His Highness's share amounting to Rs. 20,000 a year. His Highness generously recognised this good work, and last year, on the occasion of the marriage of Mr. Kilabhai's son, was graciously pleased to order a payment of Rs. 1,500 as a reward for his services in connection with the question of terminal receipts.

(c)—INCOME AND EXPENDITURE.

The following statements show the income and expenditure of the State during the two years under review :—

Receipts.

No.	Description of Items.	1902-03.	1903-04.	Increase.	Decrease.
		Rs.	Rs.	Rs.	Rs.
1	Land Revenue ...	93,36,375	1,02,47,728	9,11,353	...
2	Miscellaneous Taxes..	1,74,120	1,93,215	19,095	...
3	Forests ...	54,888	89,574	34,686	...
4	Abkari... ..	6,85,451	8,19,580	1,34,129	...
5	Customs ...	5,94,471	6,15,258	20,787	...
6	Stamps ...	5,48,024	4,41,517	...	1,06,507
7	Registration ...	1,94,480	72,954	...	1,21,526
	Carried over ...	...	...	...	...

No.	Description of Items.	1902-03.	1903-04.	Increase.	Decrease.
		Rs.	Rs.	Rs.	Rs.
	Brought forward...	...	...	...	...
8.	Tributes and fixed Jamabandi received through the Residency.	4,56,534	5,32,487	1,25,953	...
9	Do. do. received direct.	9,55	10,761	1,206	...
10	Interest ...	4,38,710	4,02,675	...	36,035
11	Opium ...	10,25,659	14,86,696	4,61,037	...
12	Railways ...	4,61,988	3,09,883	...	1,42,105
13	Cotton Mill ...	3,45,467	12,058	...	3,33,409
14	Sugar Factory ...	...	...	...	...
15	Palace ...	5,779	5,779	...	...
16	Judicial fees and fines	39,064	45,095	6,031	...
17	Jail ...	26,157	66,854	40,697	...
18	Education ...	71,503	84,084	12,581	...
19	Municipalities ...	88,239	95,150	6,911	...
20	P. W. Department ...	1,29,093	1,18,479	...	10,614
21	Mint ...	8,690	114	...	8,576
22	Miscellaneous (including Salt, Ferries, Police, Medical, Press, Army, Bank, Miscellaneous).	1,13,085	1,20,626	754	...
	Total .	1,47,95,327	1,58,19,567	17,83,013	7,58,772

Net Increase... Rs. 10,24,240

Disbursements.

1	Land Revenue ..	17,52,888	18,12,872	60,087	...
2	Other Civil Establishments.	1,09,207	1,15,130	5,923	...
3	Forests ...	51,999	54,607	2,608	...
4	Stamps ...	19,650	23,605	3,955	...
5	Registration ...	36,570	39,460	2,890	...
6	Tributes ...	103	...	...	103
7	Opium... ..	8,16,951	15,85,092	7,68,141	...
8	Railways ...	149	...	...	149
9	Cotton Mill ...	...	83,272	83,272	...
10	Palace... ..	54,35,699	37,31,700	...	27,13,999
11	Huzur Cutchery including tour expenses.	4,02,801	4,17,500	14,699	...
	Carried over ...	...	...	...	...

No.	Description of Items.	1902-03.	1903-04.	Increase.	Decrease.
		Rs	Rs.	Rs	Rs.
	Brought forward ...	...	...	...	...
12	Judicial Departments	3,21,258	3,36,755	15,497	..
13	Police... ..	6,43,822	6,86,049	42,227	...
14	Jail	87,792	47,898	...	20,894
15	Education	6,89,810	6,54,038	14,228	...
16	Medical	1,64,895	1,69,817	5,422	...
17	Mint ... ..	...	...	...	...
18	Printing Press ...	1,23,422	78,838	...	44,584
19	Municipalities ...	2,97,567	3,16,608	18,441	...
20	P. W. Department ...	12,38,092	11,20,491	...	1,17,601
21	Army	22,66,698	21,84,146	...	82,552
22	Devasthan Dharma- daya (religious grants).	2,55,531	2,78,676	23,145	...
23	Asamis, Nemnuka, &c., (Pension, &c.)	7,50,681	7,46,870	...	3,811
24	Extraordinary	5,11,030	99,420	...	4,11,610
25	Miscellaneous (including interest).	2,67,608	1,74,795	...	92,813
	Total...	1,61,73,670	1,37,46,534	10,60,480	34,87,616

Net decrease Rs. 24,27,136.

It will be seen from the foregoing statements that the average annual income of the State is slightly over 150 lacs or a million sterling.

Under receipts the largest increase during the last year as compared with 1902-03 was under (1) Land Revenue, (2) Abkari, (3) Forest, (4) Tribute, (5) Opium, (6) Jail; while there was decrease under (1) Stamps, (2) Registration, (3) Interest, (4) Railways, and (5) Mill.

The increase in the Land Revenue is due to the recovery of a portion of arrears of previous years. The increase in Abkari is due to the deposit amount of more than a lac of rupees of the Naoari and Baroda Abkari farms being credited, in part payment, on account of the arrears due from them for a previous year. The

increase under Forest is due to greater sale of forest produce. The increase under Tribute is due to the year being a good one. The increase under Opium is due to a greater quantity of opium sold in Bombay. The increase under Jail is due to certain adjustments of convict labour utilised in previous years.

The decrease in receipts under Stamps is due to there being less litigation. The decrease under Registration is due to the fact that many old documents were registered under the new Registration Act in 1902-03. The decrease in Interest and Railway Receipts is due to the Bombay Municipal Bonds worth Rs. 9,24,000 and the Railway shares worth Rs. 20,60,000 being transferred to the Khangi Department. The decrease under Mill is due to less sales of Mill productions.

The expenditure of the year 1903-04 under report was Rs. 1,37,46,534. That of the previous year was Rs. 1,61,73,670. Thus there was a decrease of Rs. 24,27,136.

Under expenditure the largest increase is under (1) Land Revenue, (2) Opium, (3) Cotton Mill, and (4) Police ; and the largest decrease is under (1) Palace, (2) Printing Press, (3) Public Works, (4) Extraordinary, and (5) Army.

The increase under Land Revenue is due to the entertainment of temporary establishments to write off arrears, as well as to the revised salaries of the Vahivat-dars. The increase in Opium is due to the purchase of opium juice which was produced in a large quantity owing to its increased cultivation. The increase under Mill is due to the greater purchase of raw materials, stores, &c. The increase under Police is due to certain

expenditure, which was originally charged to the Military, being charged to this head.

The decrease under Palace is due to the fact that a special expenditure was charged to this head in the previous year. The decrease under Printing Press is due to the less printing work being done in the last year. The decrease under Public Works is due to the curtailment of the Public Works grant. The decrease under head Extraordinary is due to a similar cause. The decrease under Army is due to the transference of some Irregular Force to the Police.

The cash balance at the close of the last year was Rs. 52,36,564 as against Rs. 48,25,794 of the previous year.

VIII.—EDUCATION.

(a)—ORGANIZATION OF THE DEPARTMENT.

In no department of administration is the far-sighted liberality of His Highness the Maharaja Gaekwar more conspicuous than in education, and in none are the results more real and tangible. The percentage of the State Revenue spent on Education is 6·5 in Baroda against 1·17 in Bengal, 1·44 in Bombay, 1·33 in Madras and about one per cent. in all British India. And the percentage of children under instruction to the total population is 8·6 in Baroda against 4·0 in Bengal, 6·2 in Bombay, 3·09 in Madras, and less than three per cent. in all British India. Seven annas is spent on education per head of population in Baroda against about an anna in British India.

A great change was introduced in the organization of the department about the close of the period under review, and a dual control over it was replaced by a single one. Up to July 1904, the Principal of the Baroda College was also the Director of Anglo-Vernacular education throughout the State, while purely Vernacular education was under a separate control. But on July *8, 1904, His Highness the Maharaja placed the department of education, English and Vernacular,

under the control of one single officer designated the Vidyadhikari or Minister of Education. And Mr. Jamshedji A. Dalal, M.A., and LL.B., of the Bombay University, was appointed the first Education Minister.

Mr. Dalal has had a varied career. He was Head Master at Surat and Ahmedabad over thirty years ago, was then a Subordinate Judge in the Bombay Presidency, and afterwards Naib Diwan and President of the Jareja Court. He came back to the Education Department in 1879, served as Professor at Ahmedabad, at Poona, and at Elphinstone College, Bombay, and finally was appointed Principal of Gujarat College at Ahmedabad. In 1888, he resigned the British service and joined service at Baroda; and he has worked in this State as District Officer and as Naib Diwan, as Famine Commissioner and as Census Superintendent, and finally as Sar Subah or Revenue Commissioner. When the Education Department was placed under a single control, Mr. Dalal was chosen as the head of that department; and on January 1, 1905, the Indian Government bestowed on him the personal distinction of Khan Bahadur.

There is one College in the State, the Baroda Government College, which sends up students for the M.A. Examination in Arts, the B.Sc. in Science, and the first LL.B. in Law. There are also three Government High Schools, *viz.*, those at Baroda, Patan and Amreli, and we have 14 Government Anglo-Vernacular Schools in the places named below:—

1 Baroda, 2 Dabhoi, 3 Padra, 4 Petlad, 5 Sojitra, 6 Vaso, 7 Kadi, 8 Mehsana, 9 Unjha, 10 Sidhpur, 11 Vignagar, 12 Vadnagar, 13 Dwarka, 14 Billimora. Besides

these there are two grant-in-aid High Schools at Naosari and Gandevi respectively, and two grant-in-aid Anglo-Vernacular Schools at Naosari and Vesma.

For purely Vernacular education we have 1,244 schools in the State, or nearly 40 schools in each Taluka. This gives an average of one school for every two or three villages.

The Principals and Professors and Teachers of the Baroda College and High School inspect all the institutions where English is taught. For the inspection of purely Vernacular Schools we have four Inspectors in the four Districts, assisted by eleven Deputy Inspectors, and one Special Deputy Inspector for Urdu and Antyaj Schools.

• (b)—ENGLISH EDUCATION.

Baroda College.—This College was first opened in 1882, and began only with a Previous Class, but has progressed step by step, until it is now recognised by the Bombay University for the full course in Arts and Science, and the first LL.B. Examination in Law. This combined privilege is not enjoyed by any other institution outside the City of Bombay; and generally our College has been considered the best College outside that City, both for excellence of teaching and for success at examinations.

Mr. A. B. Clarke, B.A., of Jesus College, Cambridge, joined Baroda College in September 1900 as Professor of English, and acted as Principal three times during the absence of the permanent incumbent Mr. Tait. On Mr. Tait's retirement on pension, Mr. Clarke has been confirmed in the post of Principal. He was appointed Fellow of the Bombay University in October 1904.

Mr. Aravind A. Ghose has been appointed Vice-Principal of the College in the current year, *i.e.*, in October 1904. Educated at St. Paul's School, London, and then at King's College, Cambridge, he competed for the Indian Civil Service in 1890, and secured a high place among the selected candidates, standing first in Greek and Latin. But failing in a physical test, he was unable to enter that service. He took first class in the Classical Tripos, 1892, and, on the invitation of His Highness the Maharaja, who was then in England, joined the Baroda service in February 1893.

Mention should also be made in this report of Professor Tapidas D. Mehta, M.A., a very experienced and highly qualified teacher in Mathematics ;—of Dr. Kanga, M.A., B.Sc., who teaches Chemistry and Physics ;—of Professor Masani, M.A., B.Sc., who teaches Biology and is also Curator of the Baroda Museum ;—and of Professor Shah, M.A., LL.B., who teaches Logic and Moral Philosophy. All the three last named gentlemen won the Chancellor's Gold Medal. Professor P. B. Naik, M.A., who teaches History and Economy, obtained the Cobden Club Gold Medal for Political Economy ; and Professor B. R. Arte, M.A., who teaches Sanskrit, obtained the Jagannath Sankarseth Scholarship.

All these Professors, as well as Professor Nawab Ali, M.A., who teaches Persian, have rendered excellent work. Professors Masani and Kanga were elected Fellows of the Bombay University in October 1904, and the first named gentleman has also been elected a member of the Syndicate in January 1905. The success of the school department is exceedingly creditable to the Head Master, Mr. Hasabnis, B.A.

The results of the different examinations during the two years under review are shown in the following tabular statement:—

Baroda College and High School.

Examinations.	1903.		1904.	
	Number of Students sent up.	Number of Students passed.	Number of Students sent up.	Number of Students passed.
Matriculation ...	56	41	64	32
Previous Examination, ...	78	41	72	45
Intermediate (Arts)	40	30	50	31
B. A. Examination	31	21	30	19
Inter. Science ...	2	nil.	2	2
B. Sc. Examination.	nil.	nil.	2	2
First LL.B. Examination ...	10	10	19	11

It may be remarked that the Baroda High School held the second place in the Matriculation Examination among all the Collegiate schools affiliated to the Bombay University.

High Schools and Anglo-Vernacular Schools.

Besides the Baroda High School there are Government High Schools at Patan and Amreli, both in a flourishing condition. And there are 14 Government Anglo-Vernacular Schools teaching up to—

- (a) the Sixth Standard,
- (b) the Fifth Standard,
- (c) the Fourth Standard, and
- (d) the Third Standard.

The schools teaching up to the Sixth Standard are at Petlad and Visnagar; those up to Fifth Standard at Dabhoi, Sojitra, Vaso, Kadi, Mehsana, Sidhpur and Dwarka; those up to Fourth Standard at Padra, Vadnagar, Unjha and Billimora; while the Baroda Anglo-Vernacular School teaches up to the Third Standard. They are all well managed and in an efficient state. Students who pass in the highest standards in their towns go up to the towns most convenient to them for higher studies, and scholarships are awarded to them for this purpose.

The rule is to open an Anglo-Vernacular School only in those towns where the population is 7,000 or more. People of some other towns, desirous of having an English education, have had to go without any for want of the minimum population. But the Minister of Education proposes to remove this disability in one or two of these places, if the budget permits it.

Grant-in-aid Schools.—There were four grant-in-aid Schools, viz., Naosari Zarthosti Madrassa, Gandevis High School, Tata Anglo-Vernacular School at Naosari, and Shri Sayaji Anglo-Vernacular School at Vesma.

Attendance.—The total number of students in the different descriptions of schools described above during

the two years under report is shown in the following tabular statement:—

Number of Students.

Institutions.	1902-03.	1903-04.
Baroda College	214	206
High Schools	930	1,007
Anglo Vernacular Schools...	1,489	1,423
Grant-in-aid Schools	525	493
Total ...	3,158	3,129

Scholarships are granted by the State on a liberal scale to help meritorious boys to prosecute their studies up to the highest standards. Forty-two scholarships of Rs. 2-8-0 each, and tenable for one year, are given for continuing study in High Schools. Five merit scholarships of Rs. 4 each, and twenty gymnastic scholarships of 8 annas per month are also awarded to students of the Baroda High School. Eight scholarships, Rs. 4 and Rs. 8 each, are awarded for the encouragement of backward classes. Fourteen scholarships, Rs. 11 to Rs. 22 each, are awarded to students of the Baroda College who secure the highest marks at different examinations. Two scholarships of Rs. 20 each are tenable by the subjects of His Highness pursuing Science and Medical studies at Poona and Bombay. Three scholarships of Rs. 20 each are given specially to Mahomedan students for the encouragement of the Mahomedan community. Three scholarships are given to the lowest caste (Antyaj) boys to foster education among them. And no less than sixty-two students get scholarships amounting to Rs. 9,228 a year from His Highness the Maharaja's private purse. Besides these, there are

scholarships endowed by funds, among which may be named the Melville Memorial Scholarship, the Kazi Shahabuddin Memorial Scholarship, the Elliot Memorial Scholarship, the Jasbhai Memorial Nagar Scholarship, the Bai Laxmi Kumari Memorial Scholarship, and the Shrimant Sayaji Rao Scholarship.

The income and expenditure of the institutions named above are shown in the following statement :—

—					1902-03.	1903-04.
					Rs.	Rs.
Expenditure ...	...	...	...	...	1,47,097	1,53,965
Receipts ...	...	...	...	...	25,585	31,123

Education in Europe.—Among the men sent up from the Baroda College to complete their education in Europe, at State expense, may be mentioned Mr. Raojibhai Bhailal Patel, now Director of Agriculture, Mr. Raojibhai Motibhai Patel, now Principal of the Technical Institute, Mr. Motibhai B. Patel, now Executive Engineer of Kadi District, Mr. Mediwalla Gustadji, now Conservator of Forests, and Mr. Amin Kashibhai Chaturbhai, now Assistant Conservator. This list does not comprise men who were sent to Europe for education by His Highness from his own purse, like the present District Officers of Baroda, Naosari and Amreli.

(c)—VERNAACULAR EDUCATION.

Graded Scheme.—The most important change introduced during the period under review was the re-introduction of the graded system of pay, dependant on the number of boys in each Vernacular school. This system was in force from 1885-86; but on January 1, 1902, the scheme was changed, and appointments and salaries were left to the judgment of the head of the depart-

ment. It was found that this new arrangement did not work well; and whatever the shortcomings of the graded scheme might be, it was considered the best, both for an efficient control over the department and for economy in expenditure. Therefore it was re-introduced by His Highness in July 1904.

The following table explains the graded scheme :—

Maximum Pay of Teachers in different Grades.

	1st grade with 600 or more pupils.	2nd grade with 500 or more pupils.	3rd grade with 400 or more pupils.	4th grade with 300 or more pupils.	5th grade with 200 or more pupils.	6th grade with 100 or more pupils.	7th grade with 50 or more pupils.	8th grade with less than 50 pupils.
1	2	3	4	5	6	7	8	9
Head Masters	60	55	50	45	35	25	20	15
1st Assistant..	25	25	20	15	12	10	8	7
2nd Do. ...	20	20	15	12	10	8	7	
3rd Do. ...	15	15	12	10	8	7	7	
4th Do. ...	15	12	10	8	7	7	7	
5th Do. ...	12	10	8	7	7	7	7	
6th Do. ...	10	10	8	7	7	7	7	
7th Do. ...	10	8	7	7	7	7	7	
8th Do. ...	10	8	7	7	7	7	7	
9th Do. ...	8	7	7	7	7	7	7	
10th Do. ...	8	7	7	7	7	7	7	
11th Do. ...	7	7	7	7	7	7	7	
12th Do. ...	7	7	7	7	7	7	7	
13th Do. ...	7	7	7	7	7	7	7	
14th Do. ...	7	7	7	7	7	7	7	
15th Do. ...	7	7	7	7	7	7	7	
16th Do. ...	7	7	7	7	7	7	7	
17th Do. ...	7	No teachers below 16th	No teachers below twelfth.	No teachers below ninth.	No teachers below seventh.	No teachers below fifth.	No teachers below third.	No teachers below Assistant Master.
18th Do. ...	7	No teachers below 16th	No teachers below twelfth.	No teachers below ninth.	No teachers below seventh.	No teachers below fifth.	No teachers below third.	No teachers below Assistant Master.
19th Do. ...	7	No teachers below 16th	No teachers below twelfth.	No teachers below ninth.	No teachers below seventh.	No teachers below fifth.	No teachers below third.	No teachers below Assistant Master.
Sepoys ...	7	6	6	6	6	6	6	6
Faras ...	6	6	6	6	6	6	6	6
Contingent...	8	7	6	5	4	3	2	1
Total...	277	238	177	136	103	73	44	23

The number of Vernacular schools of all sorts, and of pupils, in the last two years, are given in the following statement:—

Vernacular Schools and Pupils.

Year.	Government Boys' Schools.		Female Institutions.		All other Institutions.		Total.	
	Number of Schools.	Number of Boys.	Number of Schools.	Number of Girls &c., in Girls' Schools, &c.	Number of Schools.	Number of Students.	Number of Schools.	Number of Pupils.
1	2	3	4	5	6	7	8	9
1902-03 ...	388	44,262	94	12,750	627	20,840	1,209	77,888
1903-04 ...	498	44,728	94	12,731	652	21,173	1,244	78,627

The total number of Vernacular schools advanced from 1,209 to 1,244 as will appear from the foregoing statement, and that of children from 77,888 to 78,627. Fourteen ordinary schools, four Antyaj schools, five aided schools, and twenty-four Gramya schools were opened, while seven ordinary schools, one Antyaj school and four Gramya schools were closed, leaving a net increase of thirty-five in the number of schools in 1903-04. The increase was entirely in the Boys' schools, as the number of Girls' schools remained unchanged. The total number of boys was 65,896 and that of girls was 12,731 in 1903-04 against 65,108 and 12,780 respectively in the previous year. The percentage of the boys under instruction to the number of males of the school-going age increased from 43 to 43.5, a figure which is approached by few

other places in India. The Administration of Baroda can point with pardonable pride to the two facts that nearly 40 per cent. of the villages in the State have schools, and nearly 44 per cent. of the boys of school-going age attend schools.

(d)—FEMALE EDUCATION.

In these two years, the female teachers and pupils of our schools obtained prizes from Societies and Associations outside Baroda. In 1902-03, an examination of females was held by the Gujarat Vernacular Society for all comers, and 5 of our girls and teachers secured prizes, out of 6 who competed. Last year, 6 secured prizes to the amount of Rs. 113, the prizes averaging from Rs. 2 to Rs. 25 each. The Bombay Branch of the National Indian Association advertised prizes for female competitors in Essay Writing last year, and 2 Headmistresses and 2 girls from our schools competed, and they all got prizes. The embroidery work of our girls has secured prizes in the Exhibition of Women's Work at Poona this year. At the examination in Ambulance and First Aid, held by the Medical Department in Baroda, 5 female teachers and three students passed in the year 1902-03.

The number of girls attending the Girls' schools (excluding the Female Training College) during the two years under report were 8,233 and 8,232 respectively, while girls attending Mixed schools were 4,547 and 4,499. The total number of girls attending schools in the last year was thus 12,731, which number represents over 8 per cent. of the girls of school-going age. It should be remembered also that a large number of girls of the upper classes receive tuition at home, and are not included in the above

figure. And if we put down the proportion of girls receiving instruction at 10 per cent. of the total number of girls of school-going age in the State, we shall not be far from the mark.

The Female Training College is an institution maintained for training schoolmistresses. Widows and also wives of teachers receive instruction, and readily obtain appointments when they have completed the course of their education. The number attending this College was between 20 and 25. English continued to be taught in the College as in the previous year, and a Debating Society was formed, and 67 lectures delivered during the two years under report. The total expenditure of the College was Rs. 7,866 in 1902-03, and Rs. 6,216 in 1903-04.

Zenana Classes have also been opened for imparting education in reading, writing, and household accounts, to such women as do not attend school. There are six such classes attached to the principal Girls' schools, and they are examined by a Committee of ladies. The classes meet for three hours in the afternoon, when women are generally free from household duties. The Lady Superintendent examined the Nqosari and Petlad Zenana Classes in 1902-03.

(e)—COMPULSORY EDUCATION.

Compulsory Education is a new experiment in India, and some account of it will be interesting. It was in January 1900, immediately on his return from Europe, that His Highness decided to introduce Compulsory Education in one part of his State, and selected Amreli Taluka for the purpose. The rules framed were that all boys between the ages of 7 and 12, and all girls

between the ages of 7 and 10, should attend schools. The guardian of a child of this age, absenting for 10 consecutive days, or for 15 days in any month, would be liable to a fine of 2 anas. The following children were exempted from attending schools :—

- (1) Those who received instruction at home.
- (2) Those who had learnt the compulsory standards.
- (3) Those incapacitated by illness, or living over a mile from any established schools.
- (4) Purdah girls, if no special provision was made for them.
- (5) An only son of a poor cultivator, or of one unable to move about.
- (6) A girl of a mother who had an infant at breast.

No fees were charged at all. But children wishing to stay on after passing the age limit might do so on payment of a monthly fee of one anna. Children of aboriginal tribes like Bhils and Kolis were supplied with books at State expense.

On these lines schools were opened in ten villages in November 1893, in ten more villages in May 1895, in ten other villages in December 1897, and in twenty more villages in November 1898. In February 1901 and in July 1904, two more villages were provided with such schools, bringing the total to 52 up to the close of the period under report.

The result, numerically, has been very satisfactory. Out of a total population of 52,828 in the 52 villages of the Taluka, no less than 5,201 children, or nearly the entire juvenile population within the age limits stated above, attend the Compulsory Schools. Adding to this number 939 children, who have passed the age limit but con-

tinued to study in the schools, we have a total of 6,140 children in the Compulsory Schools, of whom 3,934 are boys and 2,206 are girls. Fifteen per cent. of the total population is considered to be the proportion of the children of school-going age between 7 and 15 ; and considering our lower maximum limits of age, we may fairly claim that we have succeeded in placing the whole of the juvenile population within those limits under instruction.

The result of the examinations of the Compulsory Schools and of other schools which children of the compulsory age attend, was also satisfactory. The percentage of passes was over 66 in 38 schools, between 59 and 66 in 29 schools, between 33 and 50 in 13 schools, and under 33 only in 8 schools. The total expenditure to the State for the purely Compulsory Schools was Rs. 14,046 in 1902-03, and Rs. 15,083 in 1903-04.

The success of this scheme has induced His Highness the Maharaja to direct the preparation of a Bill on Compulsory Education, which was published in the Official Gazette in July 1904. The extension of this system to other Talukas, and the improvement of the education of girls in these Compulsory Schools are receiving attention.

(f)—EDUCATION OF THE LOWEST CASTES.

Another bold move made by His Highness the Maharaja was to spread education among the very lowest castes. The conception of this Hindu Ruler is to raise and elevate those very classes whose touch is now avoided by his Hindu subjects. It was no use issuing an edict to remove the barriers, an edict would fail of success and would only accentuate the distinction. The Maharaja, therefore, decided on the wiser plan of imparting a free education to

the lowly classes, and thereby helping them to raise themselves. These classes,—the Dheds, Chamads, Khalpas, Bhangis, and others,—form a population of 163,176 in the State; and their children could not attend schools attended by other children. In 1883, therefore, it was decided to open special schools for them, and to supply them with books, slates, and other requisites.

The success which has been achieved after twenty-two years' work in this direction is still exceedingly limited; and the reason is obvious to all who know the abject condition of the classes referred to. Nevertheless, in the last year, 1,626 children of these classes, representing probably one-tenth of the children of the school-going age, were attending schools. And if one child in ten or twelve among them is receiving instruction something has been gained.

Scholarships, amounting to Rs. 40 in Baroda District, and to Rs. 25 in each of the other three Districts, is given monthly to deserving students in the fourth and higher standards of these schools. The number of schools last year was 22, and 18 of these were examined. 312 students appeared and 144 passed. A Girls' school in Baroda, attended by 65 girls of these classes, is an institution which all practical reformers will contemplate with joy.

(g)—ORPHANAGES.

Boarding schools for boys and girls have been opened at State expense at Songad, Vyara, and Mahua Talukas, and for girls at Songad. The boys are taught reading and writing, and are also taught carpentry and practical agriculture in farms, where the entire work is done by them.

During the recent famine years special arrangements were made for housing, feeding, and clothing hundreds of children who were abandoned by their parents and guardians. And the question forced itself on our attention as to what should be done with those children who were left on our hands. Many were claimed by their parents or guardians, after the time of trouble was over, but a large number remained unclaimed. After much deliberation, it was ordered by His Highness that orphanages, (*Anath Ashrams*), should be opened, one in each District, for taking charge of those children as also of others who might be found in the future without any relations or guardians to take care of them. A Draft Bill has been framed, and will be forwarded to the Legislative Department. There being already boarding houses for boys and girls in Songad, as stated before, these were availed of at first, and other orphanages were opened in March 1902. The following table gives the numbers of the children in these orphanages :—

Serial No.	Name of the Orphanage.	Number of Children.			
		1902-03.		1903-04.	
		Boys.	Girls.	Boys.	Girls.
1	2	3	4	5	6
1	Baroda	18	0	12	6
2	Mehsana	33	34	33	30
3	Amreli... ..	67	42	54	34
4	Songad Boys' Boarding School	7	0	6	0
5	Songad Girls' Boarding School	0	1	0	1
	Total ...	125	77	105	71

(h)—MUSIC SCHOOLS.

Another institution, peculiar to Baroda, is the establishment of Music Schools. The first school was opened in 1886 under the late renowned Professor of Music, Mowla Baksh, who had invented a notation for Indian Music. The system is highly popular; pupils trained in our Music Schools have opened large schools of their own in Bombay; and thus the notation and music of Mowla Baksh have acquired a wide celebrity. One of his sons is the Headmaster of our leading Music School at Baroda, and another was sent by His Highness to Europe to learn the science there. On his return from Europe he has been appointed Superintendent of the State Music Schools, in addition to other duties. There are Music Schools in a flourishing condition at Baroda, Naosari and Patan; and there are special music classes for girls in the Female Training College, in some Girls' Schools in the city, and in the Girls' Schools at Naosari and Patan.

The following table gives the figures for the Music Schools for the past two years 1902-03 and 1903-04 :—

Name of the School.	1902-03.		1903-04.	
	No. of Students.	Expenditure.	No. of Students.	Expenditure.
		Rs.		Rs.
Baroda	146		106	
Naosari	90		90	
Patan	50		44	
Total ...	286	4,760	240	4,610

(i)—SANSKRIT AND URDU SCHOOLS.

There are nine Sanscrit Schools in the State, generally maintained by Devasthan Funds or by the charity of donors, and the expenditure from the State funds in the way of grants-in-aid comes to about Rs. 1,200 a year. The State Library has a large collection of Sanscrit books and manuscripts.

There are altogether 39 Urdu Schools, specially for the Mahomedan subjects of His Highness, and these schools are attended by boys and girls. A special Deputy Inspector is employed for inspecting these Urdu Schools. The total number of boys and girls attending these Urdu Schools during the two years is given below :—

1902-03.		1903-04	
Boys.	Girls.	Boys.	Girls
3,981	489	4,175	468

(j)—MISCELLANEOUS INSTITUTIONS

There were three classes for Manual Training during the years under report, attached to the Boys' Schools at Visnagar, Patan, and Kadi. The number of students who attended these classes were respectively 108, 168 and 134 against 91, 167 and 154 in the previous year. Where there is a Manual Training Class, the students have the choice, either to attend these classes, or to take up the subjects of History and Geography in the IV, V and VI Standard classes of Boys' Schools. Drawing and Carpentry were the subjects taught in these classes.

Drawing classes are attached to the High Schools at Baroda, Patan, and Amreli, and this subject is

compulsory in all the classes except the Matriculation class. During the years under report 19 students passed in the First Grade Examination, the number being the same for both the years. And in the Second Grade the number of successful candidates for these two years was 1 and 7 respectively. There are also about half a dozen drawing classes attached to different Vernacular Schools. A complete course of drawing is taught to students in the Technical Institute, as will be stated further on.

The number of Night Schools was the same, *i.e.*, six, as in the previous year. Two of these were in the City, two in Baroda District, and two in Kadi District. The first two were Mahrathi, and the last four were all Gujrati. The highest standard taught in these Night Schools was the Fifth.

(k)—THE MUSEUM.

The Baroda Museum was established with the object of affording instruction to the people. The building was commenced in the year 1890, and completed in 1894. It runs from east to west about 150 feet in length, end to end, and about 40 feet in breadth. It is a two-storied building and contains an underground cellar.

The organisation took place in July 1894. A European Director was employed for 12 months to give it a start, and on the expiration of that period, Professor Masani was appointed as permanent Director, and occupies the post up to this day. With the liberal support of His Highness the Maharaja, the museum has gone on steadily growing in importance; and in the last year was visited daily by 995 persons on an average.

It is divided into the Arts section and the Science section. The former contains an interesting collection of typical specimens of all sorts of arts and industries from almost all countries of the civilised world, specimens of fine and applied art which can be advantageously imitated by Indian artists and craftsmen. The Indian arts are also more or less fully represented, and special care has been taken to collect and exhibit samples of the industrial arts of the Baroda State.

Among the arts specimens thus collected, the chief are silver, gold, brass, copper, bronze, iron, aluminium, electrotypes and electroplates, plain as well as engraved, inlaid and encrusted, ornamental leather work, lacquerware, carved, inlaid, and painted wood work, marble inlaying, rare pieces of old Chinaware, pottery and terracotta, porcelain and majolica of the finest description and latest make, such as the Royal Copenhagen, the Royal Worcester, the Royal Crown Derby, Doulton Ware, and the celebrated Limoges Sevres porcelain of France. The best glass work of the principal countries in the Continent of Europe has also been got together. A choice collection of pictures and paintings and some Indian musical instruments represent the fine arts. A large number of the specimens of the textile fabrics has also been collected, and arranged in show cases specially allotted to them. Among the arts specimens, collected from the different art centres within the State, may be mentioned the Sankheda lacquerware, the silk Patolas and pottery of Patan, sandalwood carved work inlaid with ivory from Billimora, brass work of Visnagar, silver work of Amreli, and blackwood carving of Visnagar and Unjha.

The Science section represents almost all the branches of natural as well as physical sciences, namely, geology, mineralogy, palæontology, botany, zoology, ethnology, archaeology, chemistry and physics, the two last named being represented by a number of typical instruments and apparatus in mechanics, hydrostatics, light, heat, sound and electricity.

The natural history gallery is sub-divided into invertebrata and vertebrata, the former containing dry and preserved animals of all orders, namely, protozoa, porifera, coelenterata, echinodermata, vermes, crustacea, mollusca, and in addition a large collection of shells.

The vertebrata class shows stuffed specimens and skeletons of the reptilia and batrachia. The ornithology is represented by skins of birds stuffed and mounted, as also skeletons, eggs, and nests of Indian as well as foreign birds. The extensive mammalian gallery has a splendid stock of mammals of all natural orders, namely, monotremata, marsupilia, edentata perissodactyla, artiodactyla proboscidea, hyracoidea, rodentia, insectivora, pinnipedia, carnivora, chiroptera and primates, in stuffed and mounted specimens, as also skeletons, skins, mounted heads and skulls.

The botanical sub-section contains a herbarium of dried plants of almost all the natural orders, met with in the Bombay Presidency, and artificial models of plants and fruits.

The anatomical room shows gypsum and papier-maché models of all parts of human and comparative anatomy, as well as a very instructive series of embryological models in wax.

The economic gallery has a fine, large collection of mineral and vegetable medicinal drugs, as well as that of

cereals, grown in the country, together with fibres, dye-stuffs, gums and other economic products.

The educational section contains object lesson cards and models of animals useful in the Kindergarten system of teaching.

The ethnological gallery consists of the Egyptian mummy, a number of old arms, coins, medals, ornaments, and a small but interesting series of spears, shoes, praying mats, combs, water bottles, pots and clubs, used by the semi-barbarous tribes of Somaliland.

In order to accommodate the exhibits enumerated above, large roomy dust-proof wall-cases, table-cases, and free standing cases, having a special lock arrangement, have been constructed ; and the open space on the walls and pillars is utilised for technological charts, anatomical, zoological and botanical diagrams, as well as for framed pictures and paintings.

The Museum Library contains books in science and art. It is not open to the public, and is made use of for purposes of reference by the Museum establishment only.

The Museum remains open to the public from 11 a.m. to 5 p.m. The evening hours, every Saturday, are reserved for Purdah ladies, when no men are allowed to enter the building.

All enquiries by artists or specialists are answered by the Director, and in his absence by the Sub-curator, and visitors of rank and distinction are shown round by either of them.

The collections in natural science have proved of exceptional service to students of biology. The students from the Baroda College, preparing for the University Examinations, freely take advantage of the natural

history galleries. Candidates for the M. A. in natural science resort to the Museum every year from all parts of the Bombay Presidency, and their study is greatly facilitated by the fully representative collection of natural history objects.

Students studying the biological science for the B. A., Inter. Sc., and B. Sc. examinations do their practical botanical work in the botanical gardens attached to the College, where plants are arranged according to their natural affinities in accordance with the natural system or classification for facility of study. The Public Park affords an increased scope for work in practical botany on an extended scale. Besides this, a herbarium in the Museum, where plants of the Bombay Presidency in general, and the province of Gujrat in particular, are kept dried and preserved, serves as a medium of considerable information and knowledge of such plants as are not found flowering at the time.

Students learning the histological botany identify the prepared specimens, and prepare new ones from the simple and compound tissues, the biological laboratory being provided with three pathological microscopes for this purpose. The Museum itself provides various prepared slides, the microscope and other scientific apparatus.

The Museum being a branch of the College, and being under the supervision of the College Professor of Biology, specimens are taken from it to the College at the time of lectures, and students study the Museum collections, at any time convenient to them, in rooms specially set apart for the purpose.

As there is no separate zoological collection for the College, the extensive natural history galleries at the

Museum exhibit specimens of osteological preparations and stuffed animals on a scale that suffices for study for any of the University examinations.

His Highness the Maharaja has been pleased to make over to the Museum two interesting collections from the Palace. The first is a collection of old arms of various sorts and descriptions that was for a long time arranged in a room in the Nazar Bag Palace. It consists of swords, guns, muskets, daggers, spears, javelins, knives, shields, miniature artillery, &c., and will be a splendid acquisition for the Ethnology section of the Museum. The other is a collection of about a dozen very beautiful and costly gold-embroidered silk Shalloos of Indian ladies. They are typical specimens of the Indian style of manufacture, showing various designs, exquisitely worked in gold and colored silk. These were sent to the Delhi Exhibition of 1903, where they were greatly admired.

Several useful and important specimens of art have been acquired for the art gallery. Those that deserve special mention are, a water colour painting on ivory of His Highness the Maharaja, prepared by Messrs. Fakirchand and Raghavdas of Delhi; a brass tray; a gold embroidery piece called Zarbaft; and a half gourd engraved and set with turquoise called Khuskhol, representing the Persian art. A blackwood cabinet inlaid with ivory, made at Monghyr, and a pillar showing the style of the woodcarving of Patna, was ordered through Mr. C. O. Ghillardi of the School of Art, Calcutta. Some jade and crystal bottles of antique workmanship were obtained from Messrs. Watson and Co. of Bombay; and the Indo-Foreign Agency of Bombay

supplied miniature models of cups, bottles, and jugs in imitation of ancient European work. A few specimens of the brass work of Madura, and brass figures made at the Art School of Madras, were added during the last year. A large candelabrum made of horn by the best workman of Vijayadurg, which received a bronze medal and diploma both at the Delhi and the Paris Exhibitions, was secured for the Museum by purchase. A bezique and whist marker's box of ivory with painted figures was obtained from a famous artisan of Vizagapatam.

Among the articles selected by the Director at the Exhibition held in connection with the 19th Indian National Congress, the principal are flower pots, a large old China porcelain bowl, Campayan and Vallaja silk Saris, cocoanut shell carved work, a gold necklace, Tinnevely mats, ivory inlaid woodwork, lacquer work figures of Hindu deities, a work box in ivory, carved Mysore sandalwood figures of Hindu gods, and conch shell bangles of Dacca.

A few specimens of Burmese art were obtained from Rangoon, such as a model boat, a model house, a hand-painted ivory fan, an embroidery piece, brass figures, and carved and gilded woodwork.

By way of encouraging local art, two musical instruments, a Touse and a Sarangi, were ordered and made by Baroda artisans. An ivory paper-knife, with the handle artistically carved, was also purchased, being considered a good specimen of local ivory-carving. A carpenter of Unjha supplied models of animals, made in blackwood.

A sandalwood chowry was obtained as a gift from His Highness. Yuvaraj Fateh Sinh Rao presented the Museum with a Buddhist Bible.

Numerous additions were likewise made in the Science Section by obtaining specimens of science in the different branches from various quarters. A collection of stuffed mammals was got in order to make the Mammalian gallery as full as possible. A number of special rocks, illustrating the eruptions of Italian volcanoes, as well as Eozoöcal rocks from Canada, with a few minerals and fossils, were secured. A series of minerals were obtained to fill up the gaps in the mineralogical collection.

An apparatus for natural colour photography, with all its accessories, was got from Messrs. Sanger Shepherd and Company, London. This is one of the latest and most improved inventions in photography.

The Herbarium was further enlarged by collecting the flora of Matheran, Mahableshtar, Abu, and other places adjoining the State of Baroda.

(l)—TECHNICAL EDUCATION.

The Kala Bhavan, literally House of Arts, is a Technical Institute of great practical utility, and is one of the most notable instances of the Maharaja's unceasing endeavours towards progress and advancement. No more useful institution for encouraging industries and manufacture exists in this State, or perhaps in India.

The Technical Institute of Baroda was founded in June 1890, with classes for drawing, carpentry, and dyeing and calico-printing, and a class in mechanical engineering was added in the same year. The Training College for men and the agricultural classes, which were already in existence, were amalgamated with the Institute. Thus, in the first year of its existence, the Institute was provided with six different courses of instruction, each to extend

over a period of three years, and was furnished with a library, a chemical laboratory, a physical laboratory, and other appliances. Workshops for the practical instruction of the students of the carpentry and mechanical engineering classes were also fitted up along with a dye-house for dyeing and calico-printing. The subjects and methods of study have undergone revision in subsequent years according to new needs and requirements.

In 1891-92 the Maharaja sanctioned a sum of Rs. 50,000 towards the preparation of literary, scientific, and technical books in the Gujrati and Mahrati languages. Three Branch Technical Institutes were opened in the same year: one at Kuthor in Naosari District, another at Petlad in Baroda District, and the third at Patan in Kadi District. And the workshops of the palace and the engineering workshops of the Public Works Department were added to the Central Institute at Baroda.

The work of preparing books was closed in 1896, with an additional grant of Rs. 15,000 to meet the liabilities already incurred. And in the same year the Branch Institute of Petlad was transferred to Vaso. One practical and gratifying result of the Petlad-Vaso Institute was the opening of the successful dyeing factory of Potlad, of which mention has already been made under the head of Industries.

In 1897 an important addition was made to the Central Institute. A weaving class was opened with the object of introducing the fly-shuttle arrangement in the ordinary hand-loom in use in this country.

In 1899 the Technical Institute of Patan was transferred to Vadnagar, and the agricultural classes were

separated from the Central Institute, and added to the Model Farm under the Director of Agriculture. Some account of this has been given under the head of Agriculture.

More ambitious work was undertaken after a visit of the then Principal to the Paris Exhibition of 1900; but much of this work, like nib and button-making, brush manufacture and pyrography, had to be abandoned subsequently. A class in watch-making was started in 1902, and has been continued. In 1904, the Vaso Branch Institute was closed, and a Branch Institute was opened at Padra.

Such has been the past history of this remarkable Institute with its Branches, and the following brief account of its working during the two years under report will indicate its present utility.

There were six schools under the Kala Bhavan during the years under report, viz., those of Art, Architecture, Mechanical Engineering, Dyeing and Calico-printing, Weaving, and Watch-making. There are also three District Technical schools at Vadnagar, Vaso and Kathor.

The total number of students in the Kala Bhavan rose in the last year from 192 to 233, while that in the Branch Institutes fell from 100 to 83 during the last year. The fall was mainly due to the prevalence of the bubonic plague.

Out of 233 students in the Kala Bhavan there were 63 students belonging to the City of Baroda, 30 to other places in the Baroda State, and 140 outsiders. Among the outsiders, 37 came from the other Native States of Gujrat and Kathiawar, 77 from the Bombay Presidency, and 26 from the Central Provinces of India.

Besides the usual Kala Bhavan scholarships, there were 7 apprentice scholarships of Rs. 8 each per mensem, and tenable for three years, awarded by the Director of Public Instruction of the Central Provinces, to help students from the Central Provinces to prosecute their studies in our Institute. There was also a scholarship of Rs. 15 per month awarded by the Porebunder State, and one of Rs. 7 per month by the Manavadar State, to the students belonging to these States.

School of Art.—At the annual examination of Sir J. J. School of Art, Bombay, 77 students of our School of Art presented themselves and 36 were successful in obtaining certificates, 3 of them being prize-winners.

School of Mechanical Engineering.—Since the recognition of this school by the Government of Bombay for Engineers' Examinations under the Bombay Boiler Inspection Act, it has been attracting a very large number of students from almost all parts of Gujrat, Kathiawar and the Deccan. There were 68 candidates who appeared at the Entrance Examination held during the year, of whom only 25 were admitted, as no more could be accommodated. 8 students of this school were successful in obtaining the Engineer's certificate from the Government of Bombay during the year under report.

Occupations of passed Students.—It may be stated generally that the students of the School of Art mostly get employed as draftsmen or drawing teachers, and only a few set up as photographers, painters, engravers or modellers. The students of the School of Architecture either get employed as draftsmen, maistries or sub-overseers in the P. W. Departments of the various Governments, or set up as carpenters. The students of the

School of Mechanical Engineering get employed in the various mills, factories and workshops as pattern-makers, moulders, smiths, fitters, turners, machine men, foremen or engineers. The students of the Dyeing and Calico-printing School get employed in dye houses and dyeing factories, or set up as dyers and calico-printers. The students of the Weaving School either set up as hand loom weavers, or get employed in the hand loom weaving factories. The School of Watch-making has not sent out any students, being only recently opened.

Five silver medals, four bronze medals and a certificate of merit were awarded to the articles exhibited by the Baroda Institute at the Industrial and Arts Exhibition held at Madras in connection with the 10th Indian National Congress.

It is necessary to mention that the present successful management of the Institute is largely due to the care and industry of Mr. Raojibhai M. Patel, its Principal. He was one of the young men who were sent to Europe by His Highness at State expense, and he studied mechanical engineering, cotton spinning and weaving, and the manufacture of textile machinery at Bolton and Manchester. He became a member of the Institute of Mechanical Engineers when in England, and returned to India in 1896. Since December 1902 he has been continuously in charge of the Technical Institute.

(m)—EDUCATION OF THE MAHARAJA'S CHILDREN.

Mr. T. H. French was in charge of the education of His Highness the Maharaja's third son, Raj Kumar Shivaji Rao, who is preparing himself for the Bombay Matriculation Examination to be held in November 1905,

with the addition of French. He worked 197 days during the last year, about 6 hours every day, except Saturdays when he did three hours' work.

His Highness's only daughter, Raj Kumari Indira Raja, worked for 204 days during the last year. She studied English with Miss Meade till March 1904, and with Miss Bhor during the subsequent months. She has begun the Fifth Reader (Longman's " Ship " Literary Series) and Gardener's History of England, and does English composition, translation, analysis, paraphrase, and parsing. She is also doing Domestic Economy and Natural Science, and in Geography has done a portion of Asia. Music is included in her studies ; and in Mahrati she has finished the Sixth Reading Book. In Sanscrit she has finished Dr. Bhandarkar's First Book, and has done some lessons of the Second Book. She has mastered the fourth Act of Kalidasa's Shankutala, and can repeat and construe the verses contained in that Act. She has also read some stories from Panchatantra, and selected passages from the Ramayana. In Arithmetic she is doing Fractions and Decimals and Practice. Sewing and embroidery work are a part of her education.

Raj Kumar Dhairyashil Rao worked 174 days during the last year. His English studies have been Nursery Rhymes, Macaulay's Horatius, &c. He also studies Grammar, Parsing, and Bhashantar Pathamala I and II. His writing has much improved, and much time has been spent over it; he is still, however, a very slow writer, and this is equally noticeable in his vernacular work. In Arithmetic he has been doing the Measures. In Mahrati he has finished the Second Reading Book, and very nearly the Third, with explanations and meanings of difficult

words. Had he not been taken ill, he would have been able to finish the studies of the Third Vernacular Standard. A little Sanscrit, mainly learning the forms of verbs and nouns, was also done, and he showed keenness for this subject.

XI.—MEDICAL.

(a)—ORGANIZATION OF THE DEPARTMENT.

The Chief Medical Officer, Dr. Shamsudin Sulemani, L.M., is the head of the Medical and Vaccination Departments. He joined the service of the State in 1876, and has the entire superintendence and control of all medical institutions. He also superintends the vaccination work of the Sanitary Commissioner.

-- Civil Surgeons are eligible for the medical charge of all hospitals, civil or military, as well as for the posts of the Sanitary Commissioner, House Surgeon, Chemical Analyser, Medical Storekeeper, and also for the office of Jail Superintendent.

Assistant Surgeons are eligible for the medical charge of 1st class dispensaries, civil or military, as well as for the duties connected with Animal Vaccination and the Lunatic Asylum.

The Chemical Analyser Dr. Sorabji F. Gazdar is also the Medical Storekeeper. As Chemical Analyser he has to examine substances in cases of suspected poisoning. As Medical Storekeeper he has to supply the various medical institutions with medicines and instruments.

One or more Hospital Assistants are attached to every hospital, and in some cases they are given independent charge of small dispensaries.

Medical Pupils, who have acquired certificates of proficiency, are employed for compounding and dispensing medicines.

(b)—INSTITUTIONS.

The subjoined table gives an exhaustive list of all the medical institutions in the State open to the public as well

as the number of in-door and out-door patients treated therein during the last two years. The Lunatic Asylum and the Military Hospitals are not shown.

Baroda City.

Institutions.	1902-03.		1903-04.	
	In-door patients.	Out-door patients.	In-door patients.	Out-door patients.
Countess of Dufferin Hospital	1,132	15,854	942	16,866
Jamnabai Dispensary ..	...	44,760	...	43,908
Mahamadwadi Dispensary ... ..	...	19,798	...	18,659

Baroda District.

Institutions.	1902-03.		1903-04.	
	In-door patients.	Out-door patients.	In-door patients.	Out-door patients.
Dabhoi Dispensary ...	15	8,024	9	1,596
Petlad Dispensary ...	27	11,919	12	13,957
Annsoya Leper Asylum...	148	1,963	144	1,401
Sankheda Dispensary ...	4	5,786	...	5,528
Sinor Dispensary ...	3	5,478	2	5,172
Saoli Dispensary ...	...	5,945	...	5,554
Vaghodia Dispensary ...	...	2,404	...	2,636
Karjan Dispensary ...	...	2,412	...	2,501
Padra Dispensary ...	3	7,987	1	7,516
Sojitra Dispensary ...	4	9,069	2	9,980
Tilakwada Dispensary ...	...	2,100	...	...

Naosari District.

Institutions.	1902-03.		1903-04.	
	In-door patients.	Out-door patients.	In-door patients.	Out-door patients.
Naosari Civil Hospital...	66	14,453	58	12,825
Gandevi Dispensary ...	1	8,131	...	6,841
Billimora Dispensary ...	4	5,027	4	5,140
Kathor Dispensary ...	...	5,535	...	5,181
Vellacha Dispensary ...	...	1,525	...	833
Songad Dispensary ...	1	3,373	4	3,463
Vyara Dispensary ...	...	3,933	...	3,785
Mahuwa Dispensary ...	...	5,493	...	3,805
Palsana Dispensary ...	...	3,737	...	1,279

Kadi District.

Institutions.	1902-03.		1903-04.	
	In-door patients.	Out-door patients.	In-door patients.	Out-door patients.
Patan Civil Hospital ...	61	10,767	67	10,034
Kadi Civil Hospital ...	49	8,891	32	8,617
Mehsana Dispensary ...	33	8,303	72	7,644
Vianagar Dispensary ...	58	7,198	96	6,001
Vadnagar Dispensary ...	1	7,493	...	8,360
Kheralu Dispensary ...	9	4,145	3	5,861
Vijapur Dispensary ...	6	10,301	4	10,561
Sidhpur Dispensary ...	25	6,050	13	6,659
Kalol Dispensary ...	...	12,229	...	9,528
Dehgam Dispensary ...	5	8,025	...	9,153
Chanasma Dispensary ...	10	5,846	2	5,223
Bechraji Dispensary ...	23	2,686	2	2,085
Harij Dispensary ...	...	1,554	...	2,061

Amreli District.

Institutions.	1902-03.		1903-04.	
	In-door patients.	Out-door patients.	In-door patients	Out-door patients.
Amreli Civil Hospital	149	13,710	155	10,878
Dwarka Civil Hospital	2	7,273	11	8,191
Kodinar Dispensary..	4	6,363	4	6,645
Damnagar Dispensary	5	5,160	...	5,570
Beyt Dispensary ... ..	.....	5,766	.....	6,285
Dhari Town Dispensary	3	2,836	1	3,156
Khamba Dispensary	.....	1,695	.....	1,226

It will be seen from the above lists that the State affords medical relief to the people on a liberal and extensive scale, and the people avail themselves of it very largely. There are three institutions in the city of Baroda. Dr. M. M. Gimmi is in charge of the Dufferin Hospital. But among all the city institutions, the Jamnabai Dispensary, situated in the heart of the town, is the most popular, and treats forty-four thousand patients annually, giving an average of over 120 patients daily. Among the Taluka dispensaries those of Petlad, Sojitra, Naosari, Patan, Vijapur, Kalol and Amreli are the most popular, each treating about ten thousand or more patients annually.

The Dufferin Hospital, of which Dr. Sumant Melita has lately been appointed House Surgeon, treated the largest number of in-door patients. Among the Taluka institutions, leaving out the Anusoya Leper Asylum, the hospitals at Amreli, Naosari, Patan, Visnagar and Kadi treated the largest number of in-door patients. Out of the total out-door attendance, about 50 per cent. was of men, about 30 per cent. of children and about 20 per cent. of women.

(c) — PREVAILING DISEASES.

The most common diseases for which patients were treated at the different medical institutions, including military hospitals, during the last two years are shewn below :—

Name of Diseases.			1902-03.	1903-04.
Malarious Fever...	...	...	102,522	85,488
Worms...	...	...	11,854	12,928
Dysentery	...	...	4,737	4,115
Diarrhoea	...	...	5,481	5,649
Venereal Diseases	...	...	6,370	5,167
Rheumatic Affections	...	...	10,653	9,569
Diseases of the Nervous System			7,658	7,227
Do. Eye	...	...	25,427	29,517
Do. Ear	...	...	16,115	16,553
Do. Skin	...	...	27,458	27,687
Do. Lungs	...	...	888	661
Other Diseases of the Respiratory System,			16,487	15,005

It will be seen that, leaving out malarial fever, the most common diseases are skin diseases and eye affections. The last is very common in this State, owing probably to the dust and the glare of the sun, and also to cultivators and their women and children watching their crops all through the heat of the day.

(d)—PLAGUE RELIEF MEASURES.

Plague raged violently during the two years under report, and there were 10,196 deaths in 1902-03, and 14,946 deaths in 1903-04, as has already been stated in another part of the report. The fumigation of houses with Neem leaves was tried in both the years, and a pill prepared by the Chief Medical Officer, Dr. Shamsuddin Sulṣmani, was widely distributed, as he considered it efficacious as a preventive measure. Each pill contains :—

Quinine	...	...	2 grains.
Ipecacuanha	...	...	$\frac{1}{4}$ grain.
Camphor	...	...	$\frac{1}{4}$ "
Carbolic Acid	...	..	$\frac{1}{4}$ M.

The pills were first brought to notice through the medium of the Indian Medical Report in 1898, and Dr. Shamsuddin gave his evidence about their efficacy before the Plague Commission in 1899. The Parsee community of Broach used these pills extensively, and Dr. Sorabsha of that town wrote that they had a decided influence in warding off attacks of plague. And the Administrator of Chhota Udaipur also wrote that the pills had been found efficacious in that State.

The best preventive of plague, however, would seem to be an improvement in the condition of the people. Figures have been given under the head Sanitation, which lead to belief that the plague has followed on the heels of famines. The three years of famine, 1900—1903, culminated in a terrible increase of plague cases, and after the good harvests of 1903-1904 plague has almost disappeared from the State in the current year.

(e)—CHEMICAL ANALYSIS.

The work done by the Chemical Analyser, Dr. Sorabji, during the last two years may be thus summarised. 49 medico-legal cases, involving separate analysis or examination of 465 different articles including samples of water, were investigated and reported on in 1902-03. Last year there were 47 such cases, involving examination of 355 articles.

The medico-legal cases above referred to are classified as below :—

Suspected cases	1902-03.	1903-04.
Human poisoning	33	31
Cattle poisoning	2	...
Blood stains, &c.	14	16

(f)—MEDICAL STORES.

The Chemical Examiner, Dr. Sorabji, is also the Medical Storekeeper, and supplies drugs, &c., to all Medical Institutions in the State.

Every year the Medical Storekeeper invites tenders for medicines, &c., from different firms in Bombay and England, and preference is generally given to the firm whose quotations are the lowest. A committee of three Medical Officers is appointed to examine the stock, and when any article does not prove to be of the required quality, it is rejected and one of better quality bought at the supplier's cost.

Several medicines such as Tinctures, Liniments, Plasters, &c., are prepared at the Store, and thereby much savings is effected, amounting on an average to about Rs. 8,000 a year during the last five years.

A few native drugs are also prepared at the Store for use at Hospitals and Dispensaries. The most important of

them are Cholera pills, which are sold at about 12 annas for a thousand.

The value of the stock of medicines, &c., in balance at the Medical Stores Depôt was Rs. 50,874 at the beginning of 1902-03 and Rs. 53,450 at the beginning of 1903-04.

(g)—VACCINATION.

The strength of the Vaccination Department was the same for the years 1902-03 and 1903-04, *viz.*, 4 Inspectors of Vaccination, 36 Vaccinators, 8 Probationers and 43 Peons and Hamals.

The subjoined table gives the total numbers vaccinated during the last two years :—

Persons.	1902-03.	1903-04.
Males	26,918	28,016
Females	24,280	24,786

The monthly returns of births and deaths show that 119 died of small-pox in 1902-1903, and 596 died from the same cause last year.

The total expenditure for vaccination for the last two years is given below :—

1902-03	...	Rs. 14,598-7-10
1903-04	...	„ 13,802-13-9

(h)—MISCELLANEOUS.

There were 10,037 principal and 2 secondary operations in 1902-03, against 9,557 principal and 2 secondary operations in 1903-04.

A midwife whose services are retained by the State attended 128 obstetric cases in 1902-03, and 151 in 1903-1904 in the town of Baroda.

Ambulance classes were regularly held, and lectures given, during the period under report.

The leper asylum at Anusoya is maintained from the revenues of Amla village. The dispensaries at Mehsana, Visnagar, and Bechraji are maintained from the Bechraji temple funds, and the dispensary at Beyt is supported by the Beyt temple funds.

Deducting these contributions, and also contributions from the Military Department, the expenditure on account of the Medical Department during the last two years is shown in the following tabular statement:—

Items.	1902-03.	1903-04.
	Rs.	Rs.
Establishment	1,11,728	1,18,519
Medicines and Instruments	29,102	28,004
Contingencies	26,889	28,281
Total Rs.	1,67,719	1,69,804

The increase under heads Establishment and Contingencies is chiefly due to increments made in the salaries of Hospital Assistants and medical pupils, and is also due to the filling up of some posts which were vacant. Less medicines and instruments were purchased last year than in the previous year.

X.—PUBLIC WORKS.

(a)—CONSTITUTION OF THE DEPARTMENT.

The Department of Public Works under the modern system, subject to the supervision of professional Engineers and an Auditor in charge of the accounts, was created in 1876. The State Engineer was the head of the Department and had the power of letting out contracts; and each District was in charge of a Sub-Engineer invested with very little authority except to carry out the orders of the head of the Department. Such an arrangement necessarily caused delay in the execution of works; and contractors who did work in the outlying Districts had to receive payments in Baroda. The unadjusted balance against the State thus reached several lacs of rupees.

In 1891 the Department was reorganised, and an Executive Engineer was appointed in each District. The Executive Engineers were given the necessary powers both as regards works and payments. Work is done quicker under this arrangement, and the large unadjusted claims have almost disappeared.

About 5 years ago, a further improvement was made. The Military, Revenue, and Police Departments used to execute small works not exceeding Rs. 1,000, without any reference to the Public Works. These works and the respective staff were transferred to the Public Works, and each Taluka has now a Public Works Subordinate to suggest improvements and carry out all the works in the Taluka. We only want a sufficient number of well-trained and competent Taluka Officers now to make this scheme completely successful. There is also a proposal to group 2 to 4 Talukas under a competent officer of higher

standing in the Public Works Department, just as is done in the Revenue Department under a Naeb Subah.

The Department of Public Works is divided into two Distinct Branches, *viz.*, the Executive and the Accounts. The Executive Branch includes all officers and other persons necessary for the preparation of designs and estimates, the supervision and control of works and the disbursement of money, together with the requisite office establishment. The duties of the Accounts Branch are connected with the preparation of accounts and the control and audit of expenditure.

The Executive Branch consists of:—

- I. Executive Engineers.
- II. Assistant Executive Engineers, Sub-Engineers, Supervisors, and Overseers.
- III. Sub-Overseers.
- IV. Persons engaged in clerical duties and inferior servants.
- V. Storekeepers, artificers, guards, messengers, and inferior servants not attached to offices.

The Chief Engineer is not in any way directly concerned with the execution of Public Works or the disbursement of money. His duties are to control generally the Engineering operations of the Department ; to exact from all employed under him a strict performance of the duties assigned to each ; to receive reports and communications from the Executive Engineers of the divisions and other officers ; to examine estimates and drawings ; to keep himself informed of the progress and completion of works ; to suggest projects and designs suitable for effecting the objects proposed to him by Government or by him to Go-

vernment; and to place before His Highness the Maharaja all subjects reserved for the decision of the Department.

In order that the Chief Engineer might be able to travel frequently, and remain in touch with every subordinate, and supervise all important works in the interior, an Under-Secretary was given to him to dispose of all the ordinary correspondence of the office.

This arrangement, however, did not quite answer its purpose, and a separate Secretary was therefore appointed, and all the administrative powers of the Chief Engineer were transferred to him. The drawback of this scheme, however, is that the Chief Engineer often remains unaware of the latest subjects of correspondence, and the Secretary remains unaware of the latest projects. This defect can, and should be, easily remedied.

During the years under report, Mr. Graham R. Lynn worked as Chief Engineer. He joined the service of His Highness the Gaekwar in 1891, having been previously employed as Engineer in the Bombay Port Trust Office. During a service of nearly 14 years Mr. Lynn proved himself a capable officer, worked harmoniously with all Departments, and discharged satisfactorily all special duties imposed upon him during the frequent famines between 1897 and 1902. Mr. Lynn retired from the State service in September 1904.

During the same period the place of Secretary was held by Mr. J. R. Chico. He is a graduate of the Bombay University in Civil Engineering, having passed in 1878, and was Engineer of the Aden Municipality for some time. He joined the service of this State in 1886 as Irrigation Engineer, and, since Mr. Lynn's retirement, is acting as Chief Engineer.

(b)—BUILDINGS AND SPECIAL WORKS.

The following important works were done, or in the course of construction, during the two years under report :—

Baroda District.—Additions to the Vishram Bag bungalow, and additions and alterations to the Moti Bag Palace.

Additions to the kitchen and out-offices of the Lakshmi Vilas Palace. Also an electric light engine and boiler house, with a view to centralising the power at this Palace for working the dynamos.

Renewing the electric plant at Makarpura Palace, and centralising the same at Lakshmi Vilas Palace, in view to serving both the installations.

A. Central Market at Baroda.

Re-erection of the Delhi Pavilion in the Public Park of Baroda.

Kadi District.—Officers' Quarters at Mehsana.

Record Building attached to Public Offices at Mehsana.

School House at Sander in Patan Taluka. •

(c)—ROADS AND BRIDGES.

The principal roads and communications which were done during the years under report were these :—

Kadi District.—Road from the Dispensary to the Travellers' Bungalow at Mehsana. Road from Mehsana Station to the Public Offices. Bridges and Culverts on Sadra Dabhoda Road, Dehgam Taluka.

Naosari District.—The extension of the low level bridge at Gandevi. Bridges and Culverts on the roads from Songad and Vyara Railway Stations to town respectively.

Amreli District.—An extension of the metalled road from Amreli to Kundla. The Khamba Kantala Road—metalled extension of the Chhalala Ingorla Road.

(d)—WELLS AND TANKS.

The following works and improvements were made during the years under report :—

Kadi District.—Improvement of Jumnapur Tank, Patan Taluka, the result of which was that 500 Bighas of land were reclaimed for cultivation. Improvement of Dhinoj Tank and putting up an earthen bund from Dhinoj to Aloda.

Amreli District.—26 wells in Dhari Taluka and 30 wells in Khamba Peta Mahal were completed, and others were in progress at the close of the last year.

Three wells in the reserves of the Dhari forests were completed.

Naosari District.—A new well at Tarsadi.

Baroda District.—Repairing and improving Pij Tank, its water being utilised for irrigating rice crops.

(e)—WATERWORKS AND DRAINAGE.

The following works and improvements were done within the years under report :—

Baroda District.—The Vishvramitri feeder to augment the quantity of water in the Sayaji Sarovar for the water-supply of Baroda City was done. The capacity of the lake was increased from 1,287 millions cubic feet to 1,817 millions cft. The catchment area was increased from 36 square miles to 58 square miles. The work of supplying the Baroda Cantonment with water from this lake was carried out, and the Bhadransiswa drain was completed.

Kadi District.—The Balisana-Keshvi drain, 283 chains in length and 8 and 12 feet wide, was executed. Six miles of canal were excavated, clearing the Kadi western drainage. A weir was built to prevent damage to the Railway Bridge near Ranuj from the deepening of the water-course by the floods of 1901-02.

(f)—RAILWAYS.

There are four State Railways. 1. Dabhoi Railway, 2. Petlad Railway, 3. Mehsana Railway, 4. Vijapur-Kalol-Kadi Railway. A short account of each will be interesting.

1. *Dabhoi Railway System.*—This was the first line owned by His Highness's Government, and was opened in 1873. It is on the narrow-gauge (2' 6") system. The management has been entrusted to the B. B. & C. I. Railway Company. It credits all traffic receipts in detail, and debits the actual cost of working the line to His Highness's Government, charging a certain percentage of gross receipts for general superintendence exercised by the Company's Officers. The different branches of this line opened for traffic are as under :—

Dates.	Sections.	Mileage.
April 1873 ...	Miagam to Dabhoi ...	20·00
April 1879 ...	Dabhoi to Chanded ...	10·62
September 1879...	Dabhoi to Bahadarpur...	9·64
July 1880 ...	Dabhoi to Goyagate ...	17·00
January 1881 ...	Goyagate to Vishwamitri.	1·63
June 1890 ...	Bahadarpur to Bodeli ...	12·77
July 1897 ...	Vishwamitri to Padra ...	7·14
July 1903 ...	Padra to Mobha ...	9·20
	Total...	80·00

- An extension from Mobha to Kanjat, about 6.49 miles, is under consideration.

The total capital outlay on this line up to the end of June 1904 is Rs. 24,48,057. The line being on narrow gauge, it is dissimilar to the parent line, the B. B. & C. I. Railway, and requires special care and attention. The ratio of expenditure to gross receipts stands high in comparison to the B. B. & C. I. Railway and to our other lines.

A review was made in 1896 of the working of this line from the beginning, and it was ascertained that it had on the average uniformly paid interest at 4 per cent. on the capital expenditure. In years of special expenditure, when a new line was constructed, or additions were made to the rolling stock, the percentage was somewhat lower. In the year 1902 the percentage was 3.68, while in 1903 it was only .33. This abnormally low percentage was due to the purchase of 3 new engines chargeable to the current accounts.

2. *Petlad Railway System.*—This line was sanctioned in December 1888. It is constructed on the broad-gauge (5'-6") system. It is worked by the B. B. & C. I. Railway on certain conditions, one of which is that it provides the use of the rolling stock free. This line was opened for traffic as under:—

Date.	Sections.	Mileage
May 1890 ...	Anand to Petlad ...	13.17
June 1901 ...	Petlad to Tarapur ...	8.88
		Total...
		21.50

The total capital outlay on this line up to the 30th of June 1904 is Rs. 11,46,908. The receipt side in this line shows a decided advantage over the Dabhoi group, it having been constructed on a similar gauge to that of the parent line, the B. B. & C. I. Railway Company. On a review in 1896 it was found that this line had secured, on an average, 6·26 per cent. interest on the capital cost. Since then the extension from Petlad to Tarapur was made, and the percentage of interest during the year 1902 was 4·83, and in the next year it was 4·42.

3. *Mehsana Railway System.*—The question of Railways in the northern part of His Highness's territories, which required development of its resources by the construction of feeder Railways to the Western Rajputana State line, was first mooted in 1880. A Railway from Mehsana to Vadnagar (20·73 miles) was sanctioned in 1885, and the actual construction was commenced in June 1886. It is on the metre-gauge system, the same as the Rajputana-Malwa line. This line was extended to Kheralu in the next year, and as Mehsana was found a convenient centre for the feeder lines in the Kadi Division, branches from it to Patan and Viramgam were added. The different branches were opened for public traffic as under:—

Date.	Sections	Mileage.
1887	Mehsana to Vadnagar	20·78
1888	Vadnagar to Kheralu ...	7·00
1891	Mehsana to Patan	24·69
1891	Mehsana to Viramgam	40·21
Total		92·68

By the construction of these feeder lines the Peninsula of Kathiawar has been brought into direct connection with the Rajputana-Malwa Railway, thus affording facility for the traffic coming from Northern India, through Mehsana, to the Kathiawar States.

The capital outlay on this line up to the end of June 1904 is Rs. 33,84,526. The line is worked by the B. B. & C. I. Railway Company, which provides the use of the rolling stock, and charges the same percentage of receipts as on the parent line. The percentage of expenditure to the gross receipts is generally higher on the Rajputana-Malwa line, with which this line is in connection, than on the B. B. & C. I. Railway which connects the Petlad line. At the end of the year 1895-96 it was ascertained that the Mehsana line paid on an average a dividend of 5.52 per cent. since its commencement. The percentage for the year 1902 was 5.89 and that for the year 1903 was 5.25.

4. *Vijapur-Kalol-Kadi Railway System.*—This line has been recently opened. That from Kalol to Vijapur (29.44 miles) was opened for public traffic in June 1902, and that from Kalol to Kadi (11.93 miles) was opened in July 1903. It is constructed on metre-gauge system, and is worked by the B. B. & C. I. Railway Company on certain conditions. The total capital outlay on this line up to 30th June 1904 is Rs. 13,86,083.

Date.	Sections.	Mileage.
June 1902	Kalol to Vijapur...	29.44
July 1903	Kalol to Kadi ...	11.93
	Total ...	41.37

The total State Railway Lines at present measure 243·50 miles, and the total capital investment on the same at the end of June 1904 was Rs. 83,15,575. The cost of constructing these lines has been cheaper than that of the B. B. & C. I. Railway line and the R. M. Railway, and the reason is that the country traversed is flat and easy and did not require any large bridges. The average rate of interest on the whole outlay was 4·61 per cent. in 1902 and 3·32 in 1903.

Besides the earnings referred to above, the State realised from its shares in the Tapti Valley and Ahmedabad-Prantij Railways (purchased for an aggregate amount of Rs. 28,62,000) a sum of Rs. 1,10,600 during the year 1902, as against Rs. 33,600 during the previous year. The increase was due to some instalments of interest relating to the past year being received in 1902, as stated under the head of Finance. In 1903 the earnings amounted to Rs. 71,600.

(g)—IRRIGATION.

His Highness has devoted much attention to the subject of irrigation, and there are several projects of such works in each District. Some of these have appeared of doubtful success, and therefore not taken in hand. In case of some others the co-operation of the neighbouring States is required, and they have been put off till an amicable agreement is arrived at. It may be useful to note shortly what has been hitherto done in this direction.

Baroda District.—Eight works have been already constructed. Seven of these are impounding tanks

made for the protection of the rice lands in Saoli and Vagodia Talukas. The eighth is the Orsang Irrigation Scheme. This is a project to dam the water of the Orsang river and use the flow for irrigating lands in the Sankheda Taluka. The completed works are estimated to cost 10 lacs. The dam which is 2,700 feet long is on a rock foundation, and six feet above the bed level of the river. The take-off for the canal is in a rocky nulla on the right bank, which is being converted into the head works of the canal, which reaches the surface between the 4th and 5th miles, whence sufficient ground will be at command for all the water available. The catchment area is between 700 and 800 square miles. The masonry dam was previously constructed, but the canal, six miles in length from Jojwa nulla to Akhtiarpura, was completed and the head works and six overbridges were finished during the years under report.

There are other projects in contemplation in this District. The project of the Alwa tank near Vagodia, which is intended to be fed by the Deo river, the Orsang canal, and the Jambusar river, and which will impound nearly 300 millions cubic feet of water for irrigating lands in the Padra Taluka, will be ripe for final consideration with plans and designs within a short time. It is estimated to cost ten lacs of rupees. Another is the Hiran river project, the object of which is to utilise the flow in the Hiran river, and to form an impounding reservoir. If the river were bunded within this State, the discharge available might not suffice to make it a financial success; it is therefore proposed to

bund the river in Chhota Udaipur territory. The project is still under investigation.

Kadi District.—The Kadarpur project is to form a reservoir by bunding the Rupen river. The bund is 12,000 feet long and 27 feet high. The reservoir and the pick-up dam and the percolation drain were completed during the years under report. The impounding capacity is about 767 million cubic feet with a catchment area of 30 square miles. This will irrigate lands in the Kheralu Taluka between the Rupen and Peshwamati rivers, where the sub-soil water is deep and well irrigation costly.

The Anawada dam is a submerged weir that has been built across the Saraswati river below Patan with the object of arresting the underflow in the sand. The idea is to raise the water after the monsoon by removable weir shutters, and to lead the water thus arrested through a canal to irrigate a portion of the Harij Taluka. It is expected that a hundred million cubic feet of water will be available early in the year, and the area that will be irrigated is 7,500 acres. The dam and three miles of canal were completed during the period under report. ••

The Dharusen Reservoir is an impounding reservoir that has been constructed to utilise the flow in the northern drainage channel from Gotwar village in the cold season. It will irrigate from 1,000 to 2,000 acres in the north of the Kadi Taluka. The head works are finished, and the canal remains to be done.

Several other projects are in contemplation in this District, the principal one of which is the

Sabarmati Scheme. Several trial pits were dug near Hadol, but this work was subsequently stopped, and arrangements have been made to open a gauging station near Dharoi.

Naosari District.—Hitherto this District has not suffered from any serious famine. There are a few irrigation works under contemplation. The Ūmrāt tank is situated in the Naosari Taluka. It has a capacity of 69 million cubic feet, and is capable of irrigating 800 acres. The Bunderpada Weir and Canal is an old work, and is situated in the Songad Taluka. It is fed by a small stream and irrigates about 200 bighas. The Chikhli Weir is constructed in the Vyara Taluka across the Mindhol river, and irrigates 300 bighas. There are four other projects in this division in course of investigation.

Amreli District.—The Singoda River project is a scheme for damming the Singoda river near Ghatwar by a masonry bund, and utilising the flow for irrigating the land on the left bank of the river. The catchment area is about 150 square miles, and it is anticipated that on an average sufficient water will be available to irrigate 3,000 acres. This work is under construction. Another project is to form a large impounding reservoir, and construct a feeder to it, to ensure its filling in the rains from the Sangawadi river. The bund is being constructed near the village of Pihvi in the Kodinar Taluka, and will impound an available supply of 280 million cubic feet, and irrigate 5,600 acres. The improvement of the Bhimgaja tank and some other schemes are also under consideration in this District.

(h)—EXPENDITURE.

During the years under report the expenditure of this Department was as given below :—

Nature of work.		Year 1902-03.	Year 1903-04.
		Rs.	Rs.
1.	Original works	12,12,954	14,02,682
2.	Repairs	2,92,020	3,83,894
3.	Establishment	1,53,074	1,79,361
4.	Tools and Plant	28,071	10,985
	Petty Revenue Public Works	17,073	54,811
6.	Petty Military Public Works	25,569	.....
7.	Famine Relief Works	2,04,053	7,165
8.	Refund ... ..	.....	103
Total		19,32,814	19,88,951

The following table will show the total expenditure incurred in each District during the years under report :—

Divisions.		1902-03.	1903-04.
		Rs.	Rs.
1.	Baroda City	3,21,505	3,67,749
2.	Baroda District	4,21,817	8,71,768
3.	Nasari District	2,17,845	1,25,594
4.	Kadi District	4,15,892	1,21,922
5.	Kadi Irrigation	1,99,727	1,37,653
6.	Amreli District	2,36,407	4,77,387
7.	Gardens	1,19,621	1,86,878
		19,32,814	19,88,951

In addition to the expenditure above shown the Department expended on account of contribution works for other Departments the sum of Rs. 1,95,843 and Rs. 2,66,464 respectively during the two years under report. Thus the total expenditures were Rs. 21,28,659 and Rs. 22,55,415 respectively. The ratio of the cost of the establishment to the total outlay was 7.12 in 1902-03 and 7.95 in 1903-04.

There were four Executive Engineers in the four Districts during the period under report; and the work of Mr. M. B. Patel, Executive Engineer of Kadi, has received the favourable notice of His Highness the Maharaja, in the current year. He was sent to England for education by the State, and qualified himself both as a Mechanical Engineer and as a Civil Engineer. His Highness has given him special promotion for careful and meritorious work.

XI.—POLICE.

• (a)—CONSTITUTION OF THE FORCE.

During the two years under report the Department was administered by Mr. Govindbhai Hathibhai Desai, B.A., LL.B., under the designation of Assistant Police Commissioner. The duty of the Police Commissioner was mainly confined to recording his opinions on memoranda submitted through him to higher authorities for orders. Mr. Desai took his LL.B. in 1888, and entered the Baroda service in 1889. For nearly 12 years he served in the Judicial Department in several capacities, as Munsiff, as Magistrate, and as Assistant Judge. He came to the Police Department in 1901 as Assistant Police Commissioner, and has continued in that post ever since.

Each of the four Districts of the State is placed under a District Police Officer, and each District Police Officer has under him Inspectors of Police having charge of two or more Talukas. Under the Inspector there is a Fouzdar for each Taluka, and each Fouzdar has a number of Naib Fouzdars, Jamadars, Havaldars, and Sepoys under him. The Fouzdar in the Police Department answers to the Vahivatdar in the Revenue, and the Munsiff in the Judicial Department, being in immediate charge of a Taluka which may be considered the lowest administrative unit. If the 32 Talukas are well administered, the good government of the State is assured.

The sanctioned strength of the Police Force, including non-effectives, was 4,879 in both the years under report. The total sanctioned strength, excluding non-effectives, was 4,763 in the last year and was distributed as follows :—

District	Sanctioned strength excluding non-effectives.	Jail, Treasury, Guard, and other duties.	Vacancies.	Number engaged in prevention and detection of crime.
Baroda	1,721	331	185	1,205
Kadi	1,524	235	77	1,212
Naosari	895	184	152	559
Amreli	623	76	38	509
Total	4,763	826	452	3,485

From the above table we find that 3,485 or 80.84 per cent. of the force (excluding non-effectives and vacancies) were employed last year on regular police duty,

viz., that of prevention and detection of crimes. The corresponding figures for 1902-03 are 3,480 or 80 per cent. No extra or punitive Police were engaged during the years under report.

Taking the number of policemen employed on the regular police duty of prevention and detection of crime, and comparing it with the area and population of the whole State, we find that there was, on an average, one policeman last year in an area of 2.32 square miles, and for every group of 559 men, as against an area of 2.33 square miles and every group of 560 men in the previous year.

Excluding non-effectives and vacancies from the sanctioned strength, there were, in the last year, 4,311 men and officers, of whom 2,362, *i.e.*, 54.79 per cent. were able to read and write. The percentage in the preceding year was 52.87, and that in 1901-02, 49.73. This clearly shows that the number of those who can read and write is steadily increasing in the force.

The number of punishments, Judicial as well as Departmental, was 1,464 in the last year, (13 Judicial and 1,451 Departmental), as against 1,988 of the previous year, (26 Judicial and 1,962 Departmental).

736 officers and men were promoted, and 49 officers and men were given money rewards, in the last year, as against 785 who were promoted, and 92 who got money rewards, in the previous year.

The total sanctioned expenditure amounted to Rs. 6,39,882 in the last year, against Rs. 6,52,636 in the preceding year. The expenditure actually incurred last year amounted to Rs. 5,96,414, against Rs. 5,94,111 in the previous year.

The different heads of charges under which the above expenditure was incurred were as follows :-

		1903-04.	1902-03.
		Rs.	Rs.
Pay and allowance	... ..	5,40,949	5,48,661
Arms and Accoutrements	... ..	14,057	917
Miscellaneous charges	... ..	4,409	44,533
Total	... ..	5,96,414	5,94,111

(b)—REFORMS.

The following are some of the principal reforms that have been introduced in the Police Department during the last three years with a view to make this department more efficient.

(1) The police schools have been placed on a better footing to impart regular and systematic instruction to recruits, and a Police Prashnottari, (Catechism), containing useful information in the form of questions and answers, has been published, and copies are distributed free to those constables and officers who can read and write. The totally illiterate are taught reading, writing and arithmetic. The percentage of those that can read and write in the force has gone on steadily rising, as already mentioned.

(2) The Dress Fund has always a large balance lying idle in the Government Treasury. A part of this money was utilised in starting a Police Bank in 1901, which advances money to the Police at a low rate of interest.

This institution has to a great extent saved the police from falling into the clutches of the Saokars, and has proved a blessing to them.

(3) Strict measures have been adopted for preventing abuses in connection with policemen buying things on credit, and leaving their accounts unsettled after transfer.

(4) Better supervision has been enforced on the part of Superior Officers to make the police more active and well disciplined. Old and useless hands have been removed from the service. Punishments have fallen from 2,127 in 1900-01 to 1,464 during the last year, indicating a decided improvement in the character and discipline of the force.

(5) Arrangements have been made for the better registration of crime. Formerly many heinous offences, such as robbery, were left unreported, and great pressure was often put to extort confessions. A larger percentage of crimes is registered now, because credit is given for actual exertions made rather than to mere percentages of discoveries. Police Officers, who resort to illegal means to induce confessions and admissions, are very severely dealt with. For the better prevention of crime the old system of patrol has been changed, and a more effective one introduced. Suspects are better registered and watched.

(6) To enable Police Officers to discharge their duties more efficiently the Department has supplied them with handy books of reference. All rules and regulations have been reduced to writing and published. Some excellent rules framed for the purpose of reminding the police of their duties have been printed and pasted on the notice-boards of all Thanas and Choukies.

(c)—STATISTICS.

The total number of offences reported to the Police was 3,764 in 1903-04, against 4,548 in 1902-03. There was thus a decrease of 784. The decrease was due to favourable harvests and to the adoption of stricter preventive measures.

The subjoined table furnishes particulars with regard to offences against person and property in the four Districts of the State for the last year, as compared with those of the preceding year :—

	Baroda.		Kadi.		Naosari		Amreli		Total.	
	1903-04.	1902-03.	1903-04.	1902-03.	1903-04.	1902-03.	1903-04.	1902-03.	1903-04.	1902-03.
Murder ...	14	14	15	10	3	3	5	2	37	29
Culpable homicide ...	9	6	20	24	9	8	5	3	43	35
Grievous hurt ...	31	22	39	67	11	12	6	12	87	113
Rape ...	2	2	2	4	...	2	...	...	4	8
Theft ...	405	392	535	957	119	146	96	161	1155	1656
Theft with house-breaking ...	263	258	167	292	44	60	45	66	519	676
Robbery ...	28	18	40	68	11	6	7	11	86	98
Dacoity ...	6	8	6	16	...	...	1	1	13	25
Receiving stolen property ...	20	11	24	49	1	5	3	6	48	71
Criminal breach of trust ...	46	36	54	41	11	14	10	15	121	106
Mischief by fire .	42	81	21	17	2	1	4	6	69	105
Miscellaneous ...	114	138	511	450	47	76	28	26	700	690
Total ...	980	986	1484	1990	258	328	210	308	3882	3612

There was thus an increase under the heads of murder, culpable homicide, criminal breach of trust, and miscellaneous offences, while the offences under other heads show an appreciable decrease. The increase in murder

cases was confined to Kadi and Amreli Districts; that in cases of culpable homicide was distributed over all the districts except Kadi. There was a marked decrease in cases of grievous hurt in all the districts except Baroda.

Referring to offences against property, we find a marked decrease in the number of dacoity cases. And as regards theft there was a decrease of 501 cases distributed over all the districts except Baroda. There was a marked falling-off in theft cases in Kadi, which also shows a great decrease in the number of cases of house-breaking.

The table given below furnishes particulars of other miscellaneous offences:—

	Baroda.		Kadi.		Naosari.		Amreli.		Total.	
	1903-04.	1902-03.	1903-04.	1902-03.	1903-04.	1902-03.	1903-04.	1902-03.	1903-04.	1902-03.
Rioting ...	...	17	40	40	20	1	5	1	65	59
Offences against coinage.	4	3	2	8	...	...	1	1	7	7
Offences against marriage	28	12	5	10	6	3	4	7	38	32
Offences against justice.	16	11	1	9	6	3	3	3	26	25
Miscellaneous ...	256	145	330	419	148	232	17	17	746	813
Total ...	299	188	378	481	175	238	30	29	382	986

Thus the offences under the above head decreased from 936 to 882. There was a decrease in Kadi and Naosari, Baroda and Amreli showing an increase.

The proportion of crime to the police employed on prevention and detection of crime in the State was 1 policeman to 1.08 crime last year, as against 1.31 in the previous year. The proportion of crime to population was 1 crime to every group of 518 men, as against 1 crime to every group of 429 in the previous year.

In addition to 3,764 cases reported during the last year, 404 cases were pending on account of arrears of the previous year. Out of this total, 315 were withdrawn by Rajinamas, and 930 ordered by Magistrate to be struck off as false. The real number of cases left for police enquiry was, therefore, 2,923. Of these, 2,349 or 80.36 per cent. were committed to Magistrates, 167 or 5.71 per cent. remained undetected, and 407 or 13.92 per cent. were pending inquiry. The following table gives the details for the years 1902-03 and 1903-04:—

Years.	No. of cases reported during the year.	Cases of previous year brought under inquiry.	Total.	Cases struck off as false.	Cases disposed of by Rajinamas.	Number of real cases for Police.
1903-04.	3,764	404	4,168	930	315	2,923
1902-03.	4,548	626	5,174	1,079	271	3,824

The subjoined table gives the disposal of real cases for police enquiry during the years 1902-03 and 1903-04 :—

Years.	Resulted in acquittal.	Rajinamas.	Resulted in conviction.	Remained pending at the end of the year.	Total number of cases sent to Magistrates for trial.	Percentage of convictions to cases sent to Magistrates excluding cases disposed of by Rajinamas and those that remained pending.
1903-04	547	103	1,452	247	2,349	72.64
1902-03	633	72	2,049	253	3,006	76.43

The number of persons arrested during the year with those left under police enquiry from last year was 4,559, of whom 3,775 were sent up for trial.

Details about disposal of persons committed for trial for the years 1902-03 and 1903-04 are given below :—

Years.	Released on Rajinamas.	Died after commencement of trial.	Escaped.	Pending trial at the end of the year.	Convicted.	Acquitted.	Percentage of those convicted after deducting from column 9 the figures in columns 2, 3, 4 and 5.	Total.
1	2	3	4		6	7	8	9
1903-04.	208	4	...	441	1,916	1,211	61.27	3,775
1902-03.	151	15	10	370	2,373	1,429	66.78	4,848

The following table furnishes details with regard to property for the years 1903-04 and 1902-03 :—

Years.	Cases in which property was alleged to have been stolen which the Police had to deal with.	Alleged value of the stolen property.	Cases in which property was recovered.	Value of property recovered.	Percentage of property recovered to property stolen.	Percentage of cases in which property was recovered to those in which it was stolen.
		Rs.		Rs.		
1903-04.	1,218	1,28,807	844	78,381	60.85	69.29
1902-03.	---	1,79,511	1,363	1,08,511	60.48	72.93

' Judged by the usual tests the general results of police administration during the years under report are given in the following table :—

Years	Percentage of convictions to cases decided by Magistrates.	Percentage of persons convicted to persons committed.	Percentage of property recovered to property stolen.
1903-04 ...	72.64	61.25	60.92
1902-03 , ...	76.13	66.78	60.48

XII.—JAILS.

(a)—DISTRICT AND SUBORDINATE JAILS.

Mr. Govindbhai H. Desai, B.A., LL.B., of the Bombay University, Assistant Commissioner of Police, was also the head of the Jail Department during the two years under report.

Besides the Central Jail at Baroda there were four District Jails in the State, *viz.*, one at Kadi, one at Naosari, one at Amreli and one at Dwarka.

There were two Subordinate Jails at Visnagar and Petlad, while there were 36 Lock-ups in the other 36 Talukas and Sub-Talukas.

The Central Jail at Baroda and the District Jails of Kadi, Naosari, and Amreli, are under the superintendence of the Civil Surgeons of these places. The Jail at Dwarka is under the control of the Vahivatdar of that place, as there is no Civil Surgeon there. The two Subordinate Jails and all the Lock-ups are under the control of Vahivatdars and Mahalkaries. There are Jailors and Assistant Jailors in the District Jails, and Jail Clerks in the Subordinate Jails and Lock-ups.

The total number of persons received in all the Jails during the two years under report was 7,620 and 4,980 respectively. This decrease is due to a decrease in crimes owing to better harvests. The total daily average in all the Jails was 1,040, against 1,522 in the preceding year.

Convicts were released on the auspicious occasion of the Delhi Darbar, and also at the marriage of Yuvaraj Fatteh Sinh Rao. Ninety per cent. of the total number of convicts were Hindus, and a little above 8 per cent. Mahomedans. Most of the convicts were of ages

between 16 and 40. About 10 per cent. of the adult convicts knew how to read and write. Agriculturists and labourers and private servants formed the largest portion of the Jail population. The offences which led to the greatest number of convictions were hurt, grievous hurt, and theft. Most of the sentences were for periods for three months to six months.

The total expenditure for the years under review was Rs. 92,722 and 67,419 respectively.

The total earnings from convict labour in all the Jails, was Rs. 27,325 in the last year, against Rs. 41,009 in the preceding year. The average annual cost per prisoner came up to Rs. 60 and Rs. 65 during the two years under report. The apparently large increase in the cost per prisoner is due to the permanent guard and establishment charges being distributed over a lesser number of daily average number of prisoners.

(b)—REFORMS.

Many reforms have been introduced in the Central Jail and the other Jails of the State since the year 1901.

The first and foremost of these is the preparation and publication of a Jail Code which clearly lays down the rules of Jail management and discipline. Schools for juveniles have also been established, as there is no regular Reformatory. The other changes introduced are of minor importance, and concern the employment of prisoners on remunerative work, the reduction of writing work in the Jail Office, sale by contract of Jail-made things, providing Jail Officials and Warders with uniforms, and lastly the introduction of the mark system for good conduct.

SUPPLEMENT.—FAMINE RELIEF, 1904-05

Gujrat had been long credited with immunity against Famines, and had accordingly been omitted from the Famine Chart of the Bombay Presidency which was prepared after the great Famine of 1877-78. From this fancied security the "garden land of India" was awakened in 1899; and Baroda, like the contiguous Districts of Gujrat, had its full measure of distress and suffering. It was in the grip of Famine for upwards of three years, from August 1899 to December 1902. The people had tolerably fair harvests in 1903, but the rains failed again in 1904. There was thus hardly any room for recuperation; hardly any breathing time or respite in this long series of seven lean years.

It was with painful anxiety that the progress of the south-west monsoon was watched by the Government, and the patient cultivators saw with dismay by the first week of September that another failure of crops was certain. Every attempt was then made by His Highness's Government to profit by the lessons of past experience, and to push on all preliminary arrangements, so that we might be found prepared for the inevitable calamity. By the end of September 1904 the total rainfall had been much below the average everywhere. Against the decennial average of 40 inches in Baroda District, the current year showed deficiency of over 50 per cent. in all the Talukas except Sankheda and Tilakwada. The Kadi District had even a worse record. The annual average for the decade immediately preceding the famine of 1899 had been 25 inches; for the current year it had not exceeded nine. Indeed the

Patan and Vadaoli Talukas had less than six inches for the whole year, while Harij and Mehsana had only a little over six. The general deficiency of rainfall throughout Kadi District thus exceeded 60 per cent. even after the late rains in September. It was, however, the Amreli District which suffered most in point of rainfall. The Talukas of Amreli, Dhari, and Dampnagar had only about 5 inches of rainfall against an average of 21, while in Okhamandal Taluka the rainfall was only 3 inches against an average of 19. Thus three of the four Districts which comprise the State showed a deficiency in rainfall exceeding 50, 60, and 75 per cent. respectively, and a widespread distress in Baroda, Kadi and Amreli was inevitable.

The usual warnings which forebode the advent of Famine, besides the failure of rains and increase in the prices of food grains, are—

- (a) the contraction of private charity, indicated by the wanderings of paupers,
- (b) the contraction of private credit,
- (c) feverish activity in the grain trade,
- (d) restlessness shown in an increase of crime,
- (e) unusual movements of flocks and herds in search of pasturage, and,
- (f) unusual wandering of people.

Some of these premonitory symptoms became evident in September 1904. The Maharaja personally watched these symptoms, and His Highness appointed Mr. Manubhai Mehta as Famine Commissioner to plan and organize relief operations, under the control and direction of Mr. R. C. Dutt, Revenue Minister of the State.

Mr. Manubhai Mehta was well qualified for the work imposed on him. He is M.A. and LL.B. of the Bombay University, and was Secretary of His Highness from 1899 to 1903. In this capacity he visited Europe with the Maharaja in 1900, and in 1903 was appointed to inspect the working of various Departments of the State. He carefully studied Sir Antony Macdonnell's valuable Famine Report, and organized operations in Baroda, as far as possible, in conformity with the recommendations made in that Report.

With the appointment of the Famine Commissioner, the strength of the Intelligence Department was duly reinforced, so that no symptom of the impending distress might escape observation.

The District and Taluka Officers were asked to watch the signs of increasing distress and send weekly reports to the central office. The Executive Engineers were warned to hold themselves in readiness with a workable list of relief works for the immediate starting of relief operations, and an adequate number of spare hands to conduct them. Special establishments were sanctioned for preparing and maturing important irrigation and drainage works, so that the outlay required for relief might not be wasted on unremunerative works of doubtful value.

The Minister, Mr. Kersaspji R. Dadachanji, was directed by his Highness the Maharaja to visit the affected Districts. He proceeded to the Kadi District, and included portions of Vadaoli, Patan and Siddpur Talukas, the Harij Peta Mahal, and Mehsana and Kheralu Talukas, in his tour of inspection.

The Minister's tour was cut short by what seemed to be a timely downpour of the long deferred rains. The

13th, 14th and 15th of September were the wettest days of the year; the rainfall registered during these three days amounted to about 12 inches in Vyara and from 8 to 10 inches in parts of Dabhoi and Sankheda. These rains saved the situation in the whole of the Naosari District, and in a part of the Baroda District. In Kadi and Amreli Districts, however, there was hardly any rain, and the situation remained unchanged. The monsoon ceased altogether on the 16th of September, and the seed sown during these three days bore no crops.

Meanwhile the Famine Commissioner set out on a prolonged tour through the Amreli District. Okhamandal was the first to suffer. Loans for maintenance are permissible in the case of respectable men and *Pardanaashin* women who are deterred by custom from resorting to relief works, but to grant such loans generally would be demoralizing. The proposal to allow maintenance loans generally was therefore negatived by the Revenue Minister, and the Famine Commissioner was advised to suggest some work that might employ the famine labourers. He proceeded to Okhamandal early in September, and suggested the extension of the Jamnagar Railway to Dwarka, and one Irrigation Reservoir at Bhimgaja. This latter project is capable of proving a veritable boon to the District if it is successful. The Jamnagar-Dwarka Railway, too, has been taken up on the programme, and the Government of India has been addressed for the necessary preliminaries in the matter. The Famine Commissioner visited Kodinar on his way back to Amreli, to arrange for the transport of Kodinar fodder to Okhamandal. Kodinar, this year, had about seventeen inches of rain, twelve of which fell within 24 hours. The fall,

though unevenly distributed, has left that Taluka in a better condition than the rest of the District. The Famine Commissioner then visited Amreli Taluka, and returned to Baroda with a modest but workable programme for the whole Amreli District.

The Famine Commissioner's visit to Amreli was closely followed by the Minister's tour in the same District. He visited the badly affected Talukas of Damnagar, Amreli, and Dhari, and also proceeded to Kodinar with a view to judge the potentialities of the two irrigation works in progress there.

Early in November, Mr. R. C. Dutt, accompanied by the Maharaja's eldest son, Srimant Yuvaraj Fateh Singh Rao, made a tour through the affected Talukas of Kadi District. He visited Mehsana, Visnagar, Sidhpur, Patan, and Kalol Talukas. All the Revenue officials from the various Talukas were also invited to meet him in a conference at Mehsana, to discuss the requirements of their several charges, and to devise the necessary measures. Outlying places, which Yuvaraj Fateh Singh and Mr. Dutt could not visit, were inspected by the Famine Commissioner, and thus all the necessary information was collected for settling the Famine programmes, and opening relief operations.

Meanwhile the Famine Commissioner had finished another useful work in revising the Famine Code with the help of the Sar Subah. The code had been hastily improvised in 1899 to meet pressing requirements, and stood much in need of modifications in the light of the ampler experience obtained since. The valuable report of the Famine Commission of Sir Antony MacDonnell had also been published, and no code could be complete

unless it took note of the conclusions arrived at by that important Commission. Sir Antony MacDonnell's report is full of suggestions as to the different methods of exacting work from relief seekers, the allotment of tasks, the fixing of wages, the classification and payment of the labourers according to their sex, age, and physical condition, and the relief of their dependants on works. The Sar Subah and the Famine Commissioner took note of all this in revising the Baroda Famine Code, which, it is hoped, will require little revision hereafter.

By the latter end of September, when the failure of the monsoons had made a famine inevitable, Test Works had been ordered to be opened in the Amreli and Okhamandal Talukas. Most of the road repair works, provided in the ordinary annual Budget, were utilised for the purpose. The Bhimgaja irrigation project, as it had been lately modified, seemed to be full of promise; and the work of breaking and collecting metal on the site of the proposed head works was sanctioned.

The numbers on these test works exceeded 600 per day by the middle of October. They were ordered to be converted into full Relief Works from the 1st of November in Okhamandal.

In Amreli, the Test Works did not attract any labourers till the middle of November. The daily average rose to 200 by the end of December. In the Kadi District, the first Test Works started in the middle of October had to be closed, but there was demand for work later on, and works had to be provided. The Famine Commissioner ordered the starting of the Thol Tank in the Taluka of Kadi, and the Muna Tank and Dasawnda Tank in Sidhpur Taluka. The Harij Mahal was also

provided with a useful irrigation tank work at Gowna-Jamnapur. The daily average on these works in the Kadi District attained the figure of 500 by the closing week of December, and some of them were converted into full Relief Works at the commencement of the new year.

In Bazoda, as noticed above, famine had been averted by the September rains in some of the Talukas; but Petlad and the rice growing Talukas of Saoli and Vaghodia had to face a total failure of crops, and relief measures became necessary. Test works were ordered to be opened by the middle of December, and within less than a week one work alone mustered about 700 men. Two other works were forthwith started in the southern villages, and they too attracted upwards of one hundred labourers each.

One reason, why still larger numbers did not avail themselves of this kind of relief, proffered by the State, was the extremely liberal advances made by His Highness's Government to the cultivators for agricultural improvements and other kindred purposes.

His Highness's Government makes an annual provision of from one to two lacs of rupees for getting wells sunk by means of advances made to agriculturists on very easy terms, and repayable by convenient and easy instalments in thirty years. Rupees 1,00,000 were thus allotted to Kadi, and Rs. 50,000 to Amreli, in the Budget for the current year. This amount has been largely supplemented on account of the famine by additional grants of Rs. 50,000 for Kadi, Rs. 50,000 for Amreli and Rs. 17,000 for Okhamandal. Most of these sums have been already given away, and others promised in the near future, with the result that thousands

of cultivators have been enabled thereby to sink wells in their holdings, and raise up some amount of rabi crop for the maintenance of their family and their cattle. Upwards of 1,500 men are employed in this way on well-sinking operations in Okhamandal, and are thus kept back from the relief centres. The small amount of crops or fodder which the wells, even during their construction, enable them to raise, prove an inestimable boon to the people. Being executed by the cultivators themselves, these small irrigation works for wells are useful irrigation works, are also economical. Unlike large public works, they do not interfere with the labour-market or involve the neglect of agricultural work; and they are less demoralising and less exposed to outbreaks of cholera and other epidemics.

Large amounts have also been sanctioned as advances to cultivators to enable them to buy seed corn and agricultural implements, such as ropes and mules for the use of their wells. Upwards of Rs. 60,000 have been sanctioned for seed for the Amreli District alone, and Rs. 25,000 have also been allotted to that District for the implements of husbandry. Large amounts have also been set apart for the Kadi District for both the above purposes, Rs. 50,000 for seed, and Rs. 30,000 for agricultural implements. Necessary provision has also been made for the Baroda District.

One great redeeming feature of the present calamity, as compared with the visitation of 1899, is that sufficient fodder has been raised by the cultivators for cattle. During the last famine, even before the earlier months of the distress were over, large numbers of milk and plough cattle had perished for want of fodder. The

mortality among these dumb creatures was frightful, and the months of October, November, and December, saw wagon loads of hides and bones exported from the land. The autumn of 1904 presaged no such carnage. There was sufficient stock of fodder, either laid by from the surplus of past years, or raised from the stunted food grains which were not ripe enough for human consumption. The Baroda Government had not therefore to face a Fodder Famine this year, except in some few tracts ; and the amounts deemed necessary for loans for grass were therefore proportionately small. About Rs. 50,000 were sanctioned for Kadi, and Rs. 20,000 for Amreli and Okhamandal. A like amount has also been set apart for the Petlad and Padra Talukas of the Baroda District. The absence of mortality amongst the cattle also explains the modest provision of Rs. 35,000 for loans for the purchase of bullocks in the Kadi District, and of Rs. 16,000 for Amreli. The embarrassment of the Government would have been greatly intensified if it had to combat against the scarcity of fodder this year, along with the scarcity of water and the failure of crops.

The prices of food grains, too, have not risen to any abnormal pitch in the present year. Though there was an upward wave in the opening weeks of the drought, the highest prices did not go beyond 25 per cent., of the usual prices. They have since remained steady, and there has been nothing like a feverish activity in the grain market. This favourable feature of the present season has enabled Government to dismiss, without much anxious thought, questions of scarcity allowance to its numerous servants, and of large amounts for Maintenance Loans. Only Rs. 28,000 have been allotted to Kadi, and

Rs. 20,000 to Amreli, as Maintenance Loans, while sums of Rs. 10,000 each have been provided for the Baroda District and the Okhamandal Taluka.

Separate Loans have also been provided for the artisan classes. Weavers and potters, carpenters and blacksmiths, often feel the pinch of famine to a degree that is scarcely realised; the contraction of demand for the products of their handicrafts has a chilling influence on their petty earnings, and whole families suffer from want and privation. If helped and encouraged with State loans, these useful tradesmen are often in a position to supply the Government with many articles of special use on famine works, for which it would otherwise have to pay enhanced prices. Cloth, woven by local weavers, proves more durable and valuable for the poor famine stricken labourers than the less coarse quality imported from distant markets. Rs. 6,000 have accordingly been sanctioned for such loans to artisan classes in Kadi, Rs. 5,000 in Amreli, and a like amount for Okhamandal.

The question of the scarcity of drinking water has been the most difficult of all in the present year. The water in wells is fast going down, and the horrors of a water famine have to be carefully provided against. Successive years of drought and scanty rainfall have dried up the sap from the soil, and the privations of remote villages and out of the way hamlets will be beyond endurance unless some protective measures are undertaken on a large scale. The Famine Commissioner has invited statistics from all the different Talukas regarding their water-supply, and large sums have been placed in the hands of the District Officers. Special boring tools, capable of penetrating to deep strata of water, have been ordered from Europe and

America ; and the sinking of temporary pits, and the burrowing of hollows in the beds of tanks and rivers, have been undertaken at the expense of the State. Cattle troughs have been arranged to be filled, and large wells with perennial supplies of underground water have been sought out with a view to their being worked in case of necessity. Rs. 50,000 have been allotted to Kadi, Rs. 20,000 to Naosari, Rs. 50,000 to Baroda, and about Rs. 10,000 to Amreli, for the safeguarding of the water-supply.

- The next item of relief that has engaged the attention of His Highness's Government is the provision of Gratuitous Relief to the aged, the infirm, and the destitute, who are all thrown upon the bounty of the State with the contraction of private charity and the shrinking of family incomes. Relief by the distribution of village doles, and the housing of the destitute incapables in poor-houses, has been an acknowledged form of help in times of famine. Directly the period of tests and trials is over, the opening of Relief Works has to be largely supplemented by the starting of village doles and poor-houses in towns. Rs. 1,00,000 have been allotted for the purpose to the Kadi District, and sums of Rs. 20,000 each to the Amreli and Baroda Districts. Institutions for housing the orphans and children deserted by their parents, which had been started in 1899, have since been continued under the management of the Education Department. And provision will be made to receive more of these waifs and strays of the population in these charitable institutions. Maternity hospitals also formed a very useful adjunct of the system of Gratuitous Relief during the last famine, and have been sanctioned in the Revised Famine Code.

The most important item in Famine Relief Administration, is however, represented by the Public Works. Programmes of works for the Kadi, Amreli, and Baroda Districts have been settled by the highest officers of the State, met in Council, and have been sanctioned by the Maharaja. Emergency Programmes have also been kept ready. The principles on which these Famine Programmes have been prepared have been deduced from the lessons of past experience, both here and in British territory. Works commenced during the last Famine, and which had to be left half finished, have been given preference to all new works; and remunerative and protective works are allowed priority over other works. Repairs to works already executed, and the maintenance of roads and earthwork embankments, are given preference over works involving an altogether fresh outlay. Amongst remunerative works, the first choice of course fell on large Irrigation Reservoirs and Dams as well as Drainage Works which were calculated to have a remunerative as well as protective value. Some parts of the State suffer from lack of irrigational facilities, while others are damaged by annual inundations. If Irrigation and Drainage works be successfully constructed in these parts, much of the evil is likely to be removed. His Highness's Government has therefore engaged for a period the services of an expert as Consulting Engineer in Irrigation matters. Mr. Khandubhai Gulabji Desai, who had acted as Presidency Engineer in Bombay, and had lately retired from the British service, was asked to give his services to the State in the maturing and preparation of these Irriga-

tion Schemes; and a special Irrigation Department has been opened under him. With his advice, and that of Mr. Vasantji, our Irrigation Engineer, we shall be in a position to start such schemes of Irrigation Canals and Reservoirs as are likely to be successful, and to yield a profitable return. The Bhimgaja reservoir in Okhamandal, the Alwa tank in Baroda supplementing the Jojwa Orsang work, the Shatrunji Dam and the Bhandaria tank in Amreli, the Dhamel tank in Damangar, the Pichwi and Shingowda projects in Kodinar, the Vadnagar feeder, the Umta and Anawada canals, and the Thol and Khakhari tanks in the Kadi Division, as well as the Reclamation and project in Hafij, are all being carefully examined by these experts. The Jankhari and the Tapti projects in Naosari, as well as the Sabarmati Scheme in Kadi, are also intended to be submitted to the Consulting Engineer for his professional opinion.

Next to Irrigation Schemes, the construction of Railways occupies a prominent place in the Famine Programmes of the State. The Baroda territories have been intersected by a net-work of small Railways which, besides being very useful, are also fairly remunerative. It is true that Railway works do not possess any pre-eminent fitness for the purposes of Famine Relief. Their earthwork alone forms the kind of unskilled labour which is suited to the capabilities of the relief-seekers. A disproportionately large amount of their estimated expenditure is taken up by skilled labour, such as is required in the building of bridges and masonry culverts; and another large outlay has to be incurred in the purchase of rails and the rolling stock. At the same time, however, the construction of metalled

roads in the sandy soil of Gujrat is not a less expensive undertaking ; and the annual cost of their maintenance is so great that Railways on the metre and narrow gauge prove more economical in the end. Accordingly, we have included in our Programme the Nar-Vaso line in the Baroda District, the Bechraji and Harij lines as well as the Vijapur-Vadnagar line in the Kadi District, and the Amreli-Chital and Jamnagar-Dwarka lines in the Amreli District.

Roads have also been classed as remunerative works, wherever they are capable of serving as feeders to Railways, or of connecting one Taluka town with another. They are selected on the ground of their securing an easy access either to celebrated places of pilgrimage, or their serving the requirements of important towns. They are also chosen for their use in securing markets for the agricultural products of the rural villages and outlying districts.

The last ground of selection in the preparation of these Programmes is the proximity of some works to the most backward districts and villages, where the people consist largely of aboriginal tribes and other depressed classes. To save the lives of such backward classes, village tanks have been provided for in the Relief Programme for this year. These tanks will also be eminently suitable as small works to be undertaken on the approach of the monsoon, when the cultivator has to be brought nearer his own home, in order that he may be able to resume his agricultural pursuit with the breaking of the rains. Moreover, most of the tanks selected are capable of being turned into a system of small irrigation tank works, each discharging its surplus

water into the other, and being fed by drainage channels further up the country. These tail tanks, when linked up with each other, are capable of retaining the necessary amount of water for purposes of irrigation, and have a highly protective value in rich rice-growing tracts. They have the further advantage of leaving a rich alluvial soil in their beds for cultivation in the dry months. The tanks in the Kadi and Kalol Talukas, as well as in the Petlad, Saoli, and Vaghodia Mahals, are all capable of this use, and are included on that ground in the Relief Programmes for the year.

These are some of the principles of selection which have been borne in mind in the preparation of the Famine Programmes for this year. And they have been liberally prepared. In Kadi District alone a grant of Rs. 9,70,000 has been allotted for Public Works, and Rs. 3,33,000 for Civil expenditure, thus aggregating about 13 lakhs. The Amreli District follows next with about Rs. 4,00,000 for Public Works, and Rs. 2,00,000 for Civil expenditure, exclusive of Rs. 70,000 sanctioned for Okhamandal. To the Baroda District has been allotted a sum of Rs. 2,65,000, out of which Rs. 1,68,000 are intended for Public Works. Lastly, the Naosari District, which alone has escaped from the present calamity, has a grant of Rs. 40,000 allotted for the safeguarding of its drinking water. Thus a liberal Budget of about Rs. 22,70,000 has been sanctioned by His Highness the Maharaja for financing the campaign against famine this year.

There is yet another matter which requires mention. The collection of the Land Revenue demand in its entirety would militate against the considerate and

humane measures described above. Instructions had therefore been issued, as early as October, to the District Officers to formulate their proposals regarding the suspension of the demand, and they were received for final disposal by the end of November. These received the careful consideration of the Maharaja, assisted by all the highest officers convened in Council, and the following decision has been arrived at. His Highness has suspended the entire revenue demand for the year in all the Talukas of the Amreli District, except in two groups of villages in the Kodinar Taluka, where only six annas in the rupee of the demand will be realized. Except the Vaghers, who have to pay only a nominal land assessment, the entire agricultural population of Okhamandal has been allowed to participate in this measure of suspension. The Kadi District comes next in its claim upon the forbearance of the Government, and the Land Revenue demand for the whole District has been largely suspended, and only six annas in the rupee will be collected on the average. In the Baroda District the realisation of all the past arrears has been suspended, and the current demand has also been wholly or partly suspended in the more afflicted Talukas and villages.

In the District of Naosari a suspension of three-fourths of the accumulated arrears of the past has been allowed in Velacha and Vakal Talukas. In ordering this suspension of revenue demand His Highness's Government has followed principles laid down in Sir A. Macdonnell's Famine Report, which may be enumerated thus :—

- (1) An early and wide publicity to the extent of the Government's demand for the current year's Revenue.

(2) The substitution of a general and rough inquiry by groups of villages in the place of inquisitorial individual proceedings.

(3) The doing away with all differentiation between the rich and the poor cultivators, and those with or without possession of land.

(4) The inclusion of the holders of alienated land and Inamidars in the same privileges as have been extended to the Khalsa lands.

The last question which came up for the consideration of His Highness the Maharaja was a remission of the Land Revenue in consideration of the succession of bad years from which the people have suffered. In order to witness the condition of the cultivators with his own eyes, and to hear their complaints with his own ears, His Highness, accompanied by his Revenue Minister and Revenue Commissioner, Messrs. R. C. Dutt and V. M. Samarth, made a prolonged tour through Amreli and Kadi districts in January and February 1905. In Amreli, after a careful enquiry, the Maharaja has ordered remissions of large portions both of the arrears and the current revenue demands. All arrears exceeding 18 months' revenue demand, as well as a fourth of the current year's revenue demand, aggregating in all to nearly four lacs of rupees, have been wiped off. Similar remissions for the other affected Districts are at present under the Maharaja's consideration.
